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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2485



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CMEA COUNTRIES SAID TO SHARE BLAME FOR POLISH FOREIGN DEBT CRISIS

Warsaw PRZEGLAD TECHNICZNY in Polish No 41, 9 Oct 83 pp 15, 16

[Article by Ryszard Slazak: "What Falling Into Debt Teaches Us"]

[Excerpts] The principal causes of Poland's economic crisis and insolvency in meeting its foreign obligations were the efforts made in the 1970s to expand the domestic economy to almost absurd lengths and integrate the Polish economy into the world economy. And on this score neither can one discount the role played by the intensive level of borrowing from the West and the failure to submit annual reports on the state of the economy to the Sejm. Nor was any report ever submitted on the political consequences of foreign borrowing. In this way the economic and financial policymaking establishment failed to keep the country's highest ranking political decisionmakers fully informed about trends in the developing economic and balance-of-payments situation or about what the future held in store.

The extent to which it had built up its ties with the world economy forced our own economy to accept a structure of economic cooperation to which it was ill suited, and this in turn triggered a profound and lasting economic and sociopolitical crisis. Institutional dislocations in our domestic economy and in our foreign trade coupled with the enormous degree to which we were dependent on credit from foreign free-market economies could have served as an incentive to make the transition to market-oriented management methods. But this did not happen. Command-directive management methods gained renewed strength in the 1970s.

Given the complexity of this situation, trade ties with other centrally planned economies tended to make existing economic institutions even more rigid. The far-reaching scope of these economic ties also tended to accelerate the pace of borrowing in both the East and the West.

Poland's growing foreign debt should have provided the political and economic decisionmakers with an opportunity to take prompter action to reverse this deteriorating situation, at least in terms of agricultural policy so that the agricultural sector would have been able to feed the nation entirely on its own, and, in pace with the growing rate of borrowing, to boost hard currency export sales of agricultural products and foodstuffs. In order to follow this course it would have been necessary to partially modify existing policies

governing relations with CEMA. Awareness of the stable trading environment that existed within the CEMA context did not do anything to encourage the channeling of more Polish goods into hard currency markets. Hence the need to make allowances for these international relationships to an extent which would preclude any sudden changes in economic policy that might generate major strains in our own economy or in the economies of our closest trading partners. Those partners which enjoyed strong trading ties with the country falling into debt also could have acted sooner to advise the government of that country of the possibility that these borrowing patterns might give rise to internal strains which could potentially assume international dimensions.

Those countries which failed to advise a trading partner of the direction its policies were taking in effect failed to render it any honest assistance. For example, such assistance could have been forthcoming first and foremost from CEMA international economic organizations and banking institutions. These are the very institutions which should warn a member country at the first opportunity of the consequences of uncontrolled borrowing. The only thing is that CEMA banking institutions cannot go very far in committing themselves to an effort to rescue the economy of a member country, since these institutions are poorly endowed with financial resources (in the form of hard currency). In view of this fact, those member countries whose economies do wind up in a state of crisis are in effect forced to rely on the aid of other countries or on their own resources in order to get out of trouble. For the most part, they must resort to mobilizing their own people in order to overcome this crisis. They must act to meet the basic and most urgent needs of their peoples by relying on their own resources. Then the question that remains is how to go about repaying the big foreign debt that will build up during the first half of the 1980s. All of these problems demand that the public should close ranks in order to work harder in their jobs and produce more.

However, the most important job facing the government should be to identify both short-term and long-term economic and social objectives, toward the prompt fulfillment of which all decisionmaking entities with custody over state and public property and private property must without exception strive to accomplish. The people need progress, and the government needs the respect of the public. Overcoming these problems and this mistrust is the common goal of the government and the people.

CSO: 2600/298

INTERNATIONAL AFFAIRS

BRIEFS

CSSR-GDR TECHNICAL COLLABORATION--Automatic washing machines from the VEB washing machine plant Schwarzeberg are equipped with electric motors from the CSSR enterprise MEZ Mohelnice. Some 80,000 of these have been delivered to the GDR thus far. When more effective drives were needed, the [Czech] partner developed these energy-saving thyristor-controlled motors. More than 500 direct relations of this type exist between enterprises, combines and research institutions of the CSSR and the GDR. Some 8,000 specialists and scientists are involved in the joint handling of scientific-technical tasks annually. A significant part of the mutually beneficial cooperation are the more than 200 contracts on specialization and collaboration between the two countries. [Excerpt] [Leipzig LEIPZIGER VOLKSZEITUNG in German 24 Oct 83 p 4]

CSO: 2300/138

STATE COUNCIL ISSUES REVISED PATENT LAW

East Berlin GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK in German Part I
No 29, 2 Nov 83 pp 284-288

["Law on Legal Protection for Inventions - Patent Law," signed by Erich Honecker, chairman, Council of State of the GDR on 27 October 1983]

[Text] With the shaping of the developed socialist society, greater demands are made on the working people's creative efforts on behalf of strengthening the GDR's economic capacity on the basis of high speed in the development of socialist production, greater efficiency, scientific-technical progress and growth in labor productivity.

An outstanding contribution to it is made by the inventors. Through their responsible creative activity they bring to realization an important social concern for the good of the people. The socialist state encourages creative efforts and an all-round use of inventions, which it safeguards by means of patents. It ensures the assumption of international obligations by the GDR to the protection of inventions.

On that, the People's Chamber is issuing the following law:

Part 1 - Range of Application

Article 1

(1) This law settles the prerequisites, substance and safeguarding of legal protection for inventions.

(2) This law applies to

--citizens,

--state-owned combines, state-owned enterprises and equivalents, state-owned and state institutions, socialist cooperatives and their facilities, party enterprises and social organizations (henceforth referred to as socialist enterprises),

--enterprises and facilities of other forms of property, and

--state and economic management organs.

(3) This law applies to citizens, enterprises and facilities of other states in conformity with the rules in international contracts or by the principle of reciprocity.

Part 2 - Principles

Article 2 - Encouraging Inventors

(1) Inventors and their scientific-technical creativeness enjoy high social respect in the GDR. Invention is encouraged by the socialist state; special protection is granted its results. Achievements by inventors are appreciated in as much as inventions contribute to the efficiency development and increase of economic capacity in the GDR.

(2) Inventors are granted comprehensive rights by the socialist state. Above all, the inventors have the right to the protection of their inventions, the right to the moral and material recognition of their achievements, and the right to the protection of their personality rights as inventors. The socialist state ensures that inventors' rights are enforced.

Article 3 - Tasks of Legal Protection

(1) The legal protection for inventions is part and parcel of science and technology management and planning. It is aimed at stimulating inventive efforts, using inventions without constraint, utilizing them effectively and efficiently protecting them, with the aim of accelerating economic performance growth and augmenting the people's property.

(2) The legal protection for inventions helps develop international economic and scientific-technical relations with other states on an equitable and reciprocal basis. Inventions by citizens, enterprises and facilities of other states are protected on the basis of GDR laws and in conformity with the international accords applying to it.

Article 4 - Tasks of the State Organs and Socialist Enterprises

(1) State organs and socialist enterprises have the task to challenge creativeness in the management and planning of scientific-technical progress and focus inventive efforts at demanding scientific-technical results and high economic effectiveness. They are under the obligation constantly to improve the conditions for the activity of inventors and ensure a performance-related moral and material stimulation on the basis of legal regulations.

(2) State organs and socialist enterprises make sure that the inventors' rights are enforced. They ensure a fast and economically effective utilization of the inventions in conformity with social requirements.

(3) Managers work closely together in developing invention activities with the trade union boards and executives. The trade unions, in close cooperation with the managers, encourage the creative initiatives of the inventors and aid them in exercising their right to moral and material recognition.

(4) The socialist enterprises are obligated to carry out all legal protection measures needed for effective protection within and outside of the GDR at once, in accordance with legal regulations in force. As enterprises originating inventions, as to Article 8, Paragraph 2, they have the exclusive right to have them protected for themselves outside the GDR.

Article 5 - Inventions

(1) Legal protection is granted for inventions. Inventions in terms of this law are technical solutions distinguished by novelty, industrial applicability and technical progress and due to inventive achievement.

(2) A technical solution is new if on the day prior to the patent application it could not become known to a sundry circle of persons so that using it would have been possible. Technical solutions are not considered new if the same solution was already presented prior to the day of patent application through a patent application to the Invention and Patent Office (henceforth referred to as AEP), with a patent already authorized for it.

(3) A technical solution is industrially applicable if it can be brought to realization in industry, the building trade, agriculture or any other economic sector.

(4) A technical solution is progressive if, in comparison with the known state of technology, it permits an effect that is apt to improve the satisfaction of public needs.

(5) A technical solution is due to inventive achievement when it cannot obviously be derived from the known state of technology.

(6) As inventions do not count:

- Solutions for the diagnosis, prophylaxis and therapy of human and animal illnesses, excepting devices;
- crop varieties and animal species and procedures for breeding them;
- mainly biological procedures, excepting microbiological ones;
- micro-organism strains;
- scientific principles, methods and discoveries;
- computer programs;
- symptoms, time-tables, rules;
- designs aimed at the satisfaction of aesthetic needs; and
- projects and drawings for the planning of installations, structures and territories.

Article 6 - Exclusion from Patent Protection

(1) No patents are granted for technical solutions in conflict with socialist morality.

(2) For technical solutions produced chemically or microbiologically or concerning substances created through nuclear fission or fusion, patents are granted only for their production and utilization procedures. In inventions that deal with foods, luxury items or pharmaceuticals, patents are granted only for their manufacture.

Article 7 - Inventors

(1) An inventor in terms of this law is the originator of an inventive achievement, as of Article 5.

(2) If an invention has several originators, they are all inventors. Shared inventiveness is not given by achievements through which the inventors were given exclusively technical or organizational assistance.

Part 3 - Economic, Exclusionary and Secret Patents

Article 8 - Economic and Exclusionary Patents

(1) Legal protection for inventions comes through the granting of economic or exclusionary patents, unless a secret patent is to be granted as of Article 9. When patents are applied for, it is to be stated whether an economic or an exclusionary patent is sought, unless the provisions on secret patents apply.

(2) Economic patents are granted for inventions originated in connection with the inventors' activities in a socialist enterprise or state organ (henceforth referred to as enterprise of origin), or through the support of which. If several enterprises are enterprises of origin, they share the rights and duties of an enterprise of origin as set down in this law. They charge one of the enterprises with the assumption of the tax's.

Article 9 - Secret Patents

(1) Secret patents are granted for inventions that are apt to increase or secure the GDR's defense readiness and for inventions concerning specific state interests. Such inventions are treated as secrets of state.

(2) Details for treating these inventions and secret patents are issued by the president of AEP in concurrence with the minister for national defense and the chiefs of the other competent central state organs in a decree. It may deviate from the provisions in the present law.

Article 10 - Rights from Economic Patents

(1) An economic patent establishes the following rights:

- (a) The inventors' right to moral and material recognition in accordance with legal regulations;
- (b) the right of socialist enterprises and state organs to make use of the invention; and
- (c) in inventions where the premises of Article 8, Paragraph 2 do not apply, the inventors' right to use the invention.

(2) In using an invention under economic patent protection, socialist enterprises and state organs have to inform AEP, and in inventions as to Article 8, Paragraph 2, the enterprise of origin, about the start and range of the use they are making of it. The enterprise of origin has the obligation to inform the inventors about its use in the enterprise or in other enterprises.

(3) Citizens, enterprises and facilities not entitled to make use of an invention, as to Paragraph 1, need the permission from AEP if they want to use an invention under economic patent protection.

Article 11 - Rights from Exclusionary Patents

(1) Exclusionary patents establish the patent owner's exclusive right to the use of an invention.

(2) At the request from the patent owner, an exclusionary patent can be changed into an economic patent at any time. The same applies to a patent application.

(3) If there is an economic, social or cultural need for using an invention under exclusionary right patent protection, the president of AEP may curtail the effect of such a patent or cancel it if no agreement can be reached with the patent owner about the use of the exclusionary patent or its transformation into an economic patent. The enterprises making use of it must in such a case pay adequate compensation to the patent owner. The amount of compensation in case of litigation is set by the Leipzig Bezirk Court.

Article 12 - The Range of the Rights

(1) The rights set down in Articles 10 and 11 always extend to the range of what the patent registration designates as being protected in an invention.

(2) The user's rights as set down in Articles 10 and 11 entail the authorization to produce, use, offer and sell the object of invention. If a mode of manufacture is protected these rights also extend to the products manufactured directly together by that method.

(3) This legal protection does not extend to air and ground vehicles and ships that only temporarily sail inland.

Article 13 - Shared Use Entitlement

(1) When someone at the time the patent is applied for has already started using the same invention domestically or made the necessary preparations for it, he is entitled to share in its use. The rights established by a patent cannot be applied against shared users.

(2) If the shared user is a socialist enterprise, all socialist enterprises are entitled to a shared use.

Article 14 - Transfer of Rights

The rights resulting from an invention, patent application and patent registration in terms of this law can be transferred and inherited.

Article 15 - Duration and Termination of Patents

(1) Patents go into effect with the patent registration.

(2) A patent is in effect for 18 years. It begins with the day on which AEP has received the patent application.

(3) A patent expires if waived by a written statement to AEP or dues are not paid at legal deadlines or those set down by AEP. The waiver right lies with the inventors for economic patents, the inventors and the enterprises of origin for economic patents for inventions as to Article 8, Paragraph 2, and the patent owners for exclusionary patents. AEP also may uphold economic patents.

Part 4 - Granting, Revising and Annulment of Patents

Article 16 - Registration of an Invention

(1) An invention has to be registered with AEP to be patented. In it, the invention has to be described in such a way that its use by other experts becomes possible. The details of patent application are set down in an order from the president of AEP.

(2) In an invention as to Article 8, Paragraph 2, the enterprise of origin has the right and duty to apply for a patent registration at AEP for the invention without delay. Such inventions have to be treated in any case as state or official secrets until the patent has been registered. Unless the enterprise applies for a patent, the inventors shall apply for it to AEP. In that case they have to inform the enterprise of origin in writing of their intended patent application.

(3) For inventions where the premises of Article 8, Paragraph 2 do not apply the inventor is entitled to apply for the patent.

Article 17 - Patent Registration

(1) AEP checks the patent application and registers a patent, provided the application meets with official application requirements and the granting of a patent is not excluded in terms of Article 5, Paragraph 6, and Article 6.

(2) Through the patent registration as to Paragraph 1, the rights as to Articles 10 and 11 are in place temporarily up to the decision as to Article 18 Paragraph 1. Claims from a patent as to Paragraph 1 can definitely be settled only after a subsequent examination as to Article 18 was undertaken. That also applies to the handling of revision and annulment procedures.

Article 18 - Examining all Premises for Protection

(1) A patent registered as to Article 17 is subsequently reexamined upon request when the invention is used in terms of whether all premises for protection, as of Article 5, are given. AEP can carry out such an examination on its own also when no use is being made. In the outcome of the subsequent examination a patent is confirmed, partly confirmed or annulled.

(2) AEP also can examine a patent application without granting a patent as to Article 17, Paragraph 1, on there being registration requirements and on the protection premises as to Article 5. In the outcome of such an examination a patent either is granted or the patent application is turned down.

(3) Pursuant to the confirmation or partial confirmation as to Paragraph 1 or to a patent registration as to Paragraph 2, the following is determined:

1. The existence of an invention and its characteristics;
2. the inventors;
3. the enterprise of origin in inventions as to Article 8, Paragraph 2; and
4. the patent owners, for exclusionary patents.

AEP issues a special certificate in appreciation of the creative achievement performed to the inventors and enterprises of origin for economic patents and to the patent owners for exclusionary patents.

Article 19 - Revisions

Upon a justified application, AEP revises patents examined, as to Article 18, for all their protective premises. Entitled to make such an application are the inventors and enterprises of origin for economic patents and the patent owners for exclusionary patents.

Article 20 - Complaints

(1) Complaint may be raised against decisions made in procedures before AEP within 2 months after the decision is received. The reasons for the complaint have to be submitted in writing. A complaint can also be waived.

(2) The complaint has to be lodged with the authority whose decision is impugned. If the complaint is reasonable, it has to alter the decision. Otherwise, the complaint is to be submitted within 2 weeks to complaint arbitration. Its decision is final.

(3) To ensure juridical uniformity in procedures before AEP, the president of AEP may have decisions by complaint arbitration rechecked in an annulment procedure by the AEP Chamber. Annulment procedures must be started within one year after the decision on a complaint.

Article 24 - Annulment

(1) A patent is annulled on AEP request if procedures for annulment arbitration establish that there are no premises for legal protection as to Articles 5 and 6.

(2) If the premises for annulment exist only in part, the patent is curbed accordingly.

(3) Against the decision on the request for annulment, an appeal can be lodged with AEP within 2 months after the receipt of the notice. That leads to a re-examination of the decision by the civil law chamber of the Supreme Court.

Article 22 - Patent Register

AEP keeps a patent register into which are entered pertinent legal data on the granting, revision, annulments and expiration of patents and on the transformation of exclusionary into economic patents, including the relevant data on the inventors, the enterprises of origin and the patent owners.

Article 23 - Promulgation

A letters patent is promulgated for patents granted by AEP. Such a promulgation may be suspended upon some justified application. The decision on that is final.

Article 24 - Dues

(1) Dues must be paid in accordance with a schedule of fees for proceedings before AEP.

(2) An annual fee is due for each patent granted at the beginning of the second and any successive year that the patent is valid.

(3) Fees for economic patents may be deferred or remitted.

(4) The AEP president in concurrence with the finance minister issues the schedule of fees.

Article 25 - Representation before AEP

(1) Anyone may let himself be represented in proceedings before AEP. If the agent charges money, he must be licensed to appear before AEP.

(2) Someone without residence or business in the GDR must resort to an agent licensed to appear before AEP and the courts for any proceedings enacted in the present law. In court proceedings, furthermore, an attorney licensed in the GDR may act as an agent.

Article 26 - Procedural Provisions

The AEP president in concurrence with the chiefs of the authorized official organs issues the details in the implementation of the proceedings before AEP and the premises for making the application as to Article 18, Paragraph 1.

Article 27 - Avoiding the Consequences of Missed Deadlines

(1) If someone involved in proceedings before AEP inadvertently misses the deadline set by law or by AEP, he can avoid the consequences of the missed deadline upon request.

(2) The remission from the consequences of missed deadlines has to be requested in writing from AEP within 2 months after the removal of the impediment. The reasons for the inadvertent delay must be given in the request. The delay must be remedied at once. If one year has gone by since the missed deadline, such a request is no longer admissible.

(3) If in the time between the expiration and the revalidation of a patent which comes back into force due to the remission from the consequences of missed deadlines the invention in question is being used or the necessary preparations for its use are made within that time frame, the user has the right of a shared user as to Article 13.

(4) The Supreme Court rules on the remission from the consequences of missing the deadline for an appeal as to Article 21, Paragraph 3. If the remission does not come simultaneously with the appeal application, the application can also go to the Supreme Court. Leipzig Bezirk Court rules on the remission from the consequences of missing the deadline for complaints as to Article 28, Paragraph 3. The application for it has to go to Leipzig Bezirk Court.

Part 5 - The Settling of Litigations

Article 28 - Litigation on the Material Recognition of the Inventors

(1) Leipzig Bezirk Court has the sole responsibility for settling litigation on the material recognition of inventors in economic patents. Prior to lodging a complaint with Leipzig Bezirk Court, AEP arbitration has to be enlisted. While the arbitration office deals with the case, the period of limitation governing the claims comes to a halt. That is not the case when the suit is waved.

(2) Arbitration is made up of three members, one appointed by the FDGB [Free German Labor Union Federation].

(3) Arbitration submits a settlement proposal. That becomes binding unless any party involved brings suit to the Leipzig Bezirk Court within 3 months after receiving the settlement proposal. It is up to the courts to execute a binding settlement proposal.

Article 29 - Litigation on Violations of the User Rights Granted through the Granting of Patents

(1) If an invention under patent protection is used in violation of the provisions of Articles 10 and 11 within the scope of economic activity, a suit may be brought to Leipzig Bezirk Court for injunction and damages. Enterprises of origin are entitled to injunction claims with respect to economic patents for inventions as to Article 8, Paragraph 2. For other economic patents, it must be a socialist enterprise designated by the competent central state organs. For exclusionary patents, the patent owners have that right. Injured parties are the ones that are entitled to damage claims.

(2) If injunction claims relate to use or damage claims, to an invention relating to the manufacture of a new material, until the opposite is proven all material identical in nature is considered as manufactured by the patented method.

(3) The claims referred to in Paragraph 1 have a 3-year period of limitation starting at the moment when the parties of entitlement found out about the violation and the person of the violator. Irrespective of such knowledge, such claims have a 10-year period of limitation starting from the moment of the violation.

Article 30 - Litigation on Original Property and Entitlement

(1) Leipzig Bezirk Court is exclusive in charge of settling litigations on the parentage of inventions, on there being, in fact, an invention as to Article 8, Paragraph 2, and on the proprietary interest in exclusionary patents.

(2) Pursuant to a legal ruling on a suit as to Paragraph 1, AEP makes the necessary changes in the patent register and the other official documents. Decisions in proceedings before AEP always are subject to legal rulings.

Part 6 - Transitional and Concluding Provisions

Article 31

Implementing regulations for this law are issued by the president of AEP in concurrence with the heads of the competent central state organs.

Article 32

(1) The provisions of Articles 5 and 6 apply to all inventions for which patents are requested from AEP after this law goes into effect.

(2) The provisions of Article 10 on the right to use an invention under economic patent protection and on the information AEP has to issue in the case of such a use also apply to inventions under economic patent protection before this law goes into effect.

(3) Additional patents granted before this law goes into effect continue to be dealt with in terms of the patent law of the GDR of 6 September 1950 (GBI No 106, p 989) on additional patents. Patent applications for the granting of additional patents continue to be treated as independent patent applications.

Article 33

(1) This law goes into effect on 1 January 1984.

(2) Simultaneously rescinded are:

--The patent law for the GDR of 6 September 1950 (GBI No 106 p 989) in the version of figure 5 of the appendix of the adaptation law of 11 June 1968 (GBI Part I, No 11 p 242);

--the law of 31 July 1963 amending the patent law of the GDR and canceling the trade-mark law for the GDR--law amendment on the patent law (GBI Part I, No 9 p 121);

--the first implementing regulation of 20 March 1952 on the patent law for the GDR (GBI No 44 p 281);

--the 21 May 1951 decree on setting up the patent court (GBI No 61 p 483); and

--the 6 September 1950 law on setting up AEP in the GDR (GBI No 106 p 1000).

5885

CSO: 2300/130

CHAMBER OF TECHNOLOGY CONGRESS SETS ENGINEERS NEW GOALS

General Report

East Berlin NEUES DEUTSCHLAND in German 21 Nov 83 p 1

[Unsigned article datelined Berlin: "For Highly Effective Science and Technology"]

[Text] By adopting a resolution staking out the further tasks to increase the effectiveness of science and technology down to the second half of the 1980's and the election of the executive organs of the engineering organization, the Eighth KDT [Chamber of Technology] Congress finished its work in Berlin on Saturday. Prof Dr Manfred Schubert was reelected KDT president. He affirmed in his concluding remarks that the KDT members would contribute through new deeds to strengthening the republic and solving the most urgent task of the present, the safeguarding of peace.

Before noon on the second day of the congress, the chiefs of the six task forces reported on the results of the creative discussion in which 106 speakers took the floor. Propositions on how the level of technical engineering work is to be elevated in R&D to ensure top achievements were discussed in the task forces. The point was made that the KDT, in shaping the tasking workbooks in R&D, had to bring a greater influence to bear on getting more benefits out of patents, on the rationalization of mental work and on finding new production ideas. Special attention also was paid to the new educational requirements. The proposal was made to gather together all engineers engaged in project planning and design on the level of the bezirk associations. Discussed further were tasks in the materials and energy economy and in consumer commodity production.

In the eighth congress resolution the delegates promise noticeably to strengthen their initiatives, in the name of the more than 260,000 members, to improve the effectiveness of science and technology efforts perceptibly. KDT members are going to assume extra commitments to fulfill and exceed the science and technology plans.

Delegates' Closing Resolution

East Berlin NEUES DEUTSCHLAND in German 21 Nov 83 p 4

[Unsigned article: "Engineers' Organization Increases its Creative Contribution: Excerpts from the Delegates' Resolution on Future Plans"]

[Heat] The congress resolution states: "In implementation of the economic strategy of the 10th SED Congress, KDT members perform high creative achievements in science, technology and production to strengthen the GDR and preserve the peace.

"The Eighth KDT Congress appreciates these initiatives and calls on all members of the socialist engineers' organization, in view of the exacerbation of the international class conflict and the serious threat to world peace by the most aggressive circles of imperialism, especially those of the United States, to fight still more resolutely for increasing the economic yield from science and technology."

The resolution affirms that scientists, engineers, economists and innovators find their obligation in linking still more effectively, under proven Marxist-Leninist party leadership and alongside the workers class, the advantages of the socialist social order with the accomplishments of the scientific-technical revolution. That was motivated by the basic realization that the continued successful implementation of the main task in the unity of economic and social policy required new ideas and top achievements from research to production so as to ensure the needed performance and efficiency growth while fund allocations are being tightened. Enterprise sections, to exceed significant tasking workbook parameters, will agree on a larger scope of KDT projects containing commitments to coming up with additional inventions so as to significantly increase the replacement rate in the economy and reduce relative and absolute expenditures.

The resolution orients to the following focal points on which all KDT members are concentrating their efforts:

--Tapping further reserves to enforce qualitative intensification factors to implement the main task in industry, construction and agriculture, and especially in the housing construction program and in transportation and in stably supplying the population with foodstuffs.

--A higher energy economy through a resolute and thrifty use of domestic fuels, an absolute cutback in energy consumption, the development and broadly effective introduction of energy-saving procedures and products, and a speed-up in the use of secondary energy.

--Enhanced refining of raw materials and semifabricates and a consistent improvement of the input-output ratio through an effective use of the possibilities of microelectronics, the elaboration and application of material-saving standards and actualized computation regulations, light construction and progressive construction, the development of technologies that are low in or free of waste products, and working material substitution.

--A great boost to labor productivity through the complex rationalization of labor-intensive processes, flexible mechanization and automation, the effective use of industrial robot technology, ADP and the development and construction of highly productive means of rationalization. As a result, labor is to be released mainly for constructing means of rationalization and for consumer commodity production.

--Improving the quality level and design features of products while greatly reducing the costs through applying the system of faultless labor, improving the measuring and testing techniques and inducing critical attitudes toward quality deficiencies and a more vigorous activity of the KDT quality activists groups and circles.

--Development and production of high-grade consumer goods through novel production ideas and their immediate utilization; shaping combative positions on the tapping of reserves and an increased manufacture of new products that are in special demand in all sectors, including the enterprises that make the means of production.

As prerequisites for a high performance improvement, for peace and socialism, so the resolution states, the important intellectual-creative potentials, especially in design, project planning and technology, must be much more effectively and economically exploited, and all KDT members must be motivated, enabled and mobilized for coping with the increasing tasks. In this connection the resolution underscores the task of the enterprise sections and technical KDT organs to turn, without reservation, the struggle for scientific-technical achievements of international rank into the crucial criterion for work oriented to optimum standards.

Proceeding from public requirements and industrial performance goals, the KDT members assume the task in the resolution to take on everywhere additional ambitious obligations for fulfilling and exceeding the science and technology plans. An interim balance-sheet on this effort at intensification and higher labor productivity is going to be drawn up in October 1984 in the "KDT Weeks" and at the "Day of the Engineer."

5885

CSO: 2300/136

GERMAN DEMOCRATIC REPUBLIC

ORDER ON METALLURGY SUPPLY

East Berlin GESETZBLATT DER DEUTSCHEN DEMOKRATISCHEN REPUBLIK in German Part I No 21,
15 Aug 83 pp 209-213

/Text/ "Order on the Supply of the National Economy with Metallurgic Products - Metallurgy Supply Order - of 14 July 1983," signed by Dr Kurt Singhuber, Minister for Ore Mining, Metallurgy and Potash, on 14 July 1983; Attachment, unsigned

/Text/ In agreement with the managers of the competent central state organs, the following is ordered for the planned and flexible supply of metallurgic products to the national economy:

Article 1

Scope

(1) This order applies to the supply of metallurgic products to the national economy of ELN /product and performance nomenclature/ Nos 121 and 122--exclusive of precious metals and their semifinished products--inclusive of ores as well as of

Forged bar steel	(ELN No 125 15 000)
Copper drop forgings	(ELN No 125 81 000)
Brass drop forgings	(ELN No 125 82 000)
Light metal drop forgings	(ELN No 125 83 000)
Steel wire rope (excluding rope for conveyor belts)	(ELN No 135 76 001)
Aluminum rope	(ELN No 135 76 003)
Steel-aluminum rope	(ELN No 135 76 004)
Steel wire rope for conveyor belts	(ELN No 135 76 006)
Fittings	(ELN No 135 97 100),

hereinafter designated metallurgic products.

(2) This order applies to central state organs as supply sectors, to fund holders and customers as well as to balancing and balance assigned combines, manufacturers

and traders in means of production (suppliers). This order also applies to foreign trade enterprises that import metallurgic products as per Paragraph 1. The order does not apply to the supply of metallurgic products to private citizens.

(3) This order applies to deliveries and services to armed organs only if not otherwise provided in the Decree of 15 October 1982 on Deliveries and Services to the Armed Organs--Delivery Decree (LVO)--(GBI I No 31 p 357).

Section 1

Principles

Article 2

(1) To achieve materials conservation consonant with the most stringent economic requirements, the manufacturers of metallurgic products and their customers must provide such terms for their cooperation that the material funds are called upon by products of low material intensity and that the weight-performance ratio of the final product is improved. The balancing or balance assigned combine or the manufacturer of metallurgic products must suggest to the customer the use of refined products and contract with him if the use of refined products results in the more efficient material use in terms of the national economy.

(2) The customer must involve the manufacturer of metallurgic products in the preparation and defense of the tasking workbook for intended new developments of his products, designs and technologies consonant with the Decree of 17 December 1981 on the Tasking Workbook for Research and Development Tasks--Tasking Workbook Decree--(GBI 1982 I No 1 p 1) if the development results in changes in the quality, assortment or quantity of the demand for metallurgic products, or if the demand diverges from the preferential assortment. The customer's obligation to obtain a state inspection certificate from the steel advisory agency is not affected thereby.

(3) Upon request by the customer or manufacturer, the general director of the combine of which the manufacturer is part and the manager of the fund holder must conclude a coordination contract in the period between the confirmation of the tasking workbook and, at the latest, the K 5 development stage. This contract must have the approval of the competent balancing or balance assigned combine and the steel advisory agency. The coordination contract obligates the partners to adopt coordinated measures and decisions with regard to the change in demand to be expected.

(4) When new developments of metallurgic products or technologies are proposed, the manufacturers of the metallurgic products must involve their main customers in the preparation and defense of the tasking workbooks as per the Tasking Workbook Decree if the development results in changes in the volume of the output by assortments and makes significant new demands on the main customers' processing conditions. A coordination contract as per Paragraph 3 must be concluded upon request by the manufacturer or customer.

(5) While preparing the draft of the annual plan, the customer must notify the competent balancing or balance assigned combine of significant changes in the quantity of a metallurgic product required.

Article 3

(1) The general director of the balancing or balance assigned combine of metallurgy is entitled in a coordination contract to agree the special manner of supply and cooperation with the manager of the fund holder, if this would result in greater economic efficiency.

(2) The coordination contract is binding on the suppliers in the sphere of responsibility of the balancing or balance assigned combine and on the customers subordinated or assigned to the fund holder.

Section II

Management of the Supply Process

Article 4

Central State Management

(1) The supply of metallurgic products to the national economy is directed and supervised by the Ministry for Ore Mining, Metallurgy and Potash. This ensures supplies as per plan and flexibly, in close cooperation with the supply sectors.

(2) Supply is governed by the legal regulations on materials planning and balancing and fixed state funds.

State Plan Targets

Article 5

Principle

(1) The supply of metallurgic products of the nomenclature of state plan and ministerial balances to the national economy proceeds within the framework of the state plan targets balance quota, materials consumption and stock volume.

(2) The supply to the national economy of metallurgic products of the nomenclature of the balances to be confirmed by the minister or the general director of the balancing combine proceeds within the scope of the state plan target balance quota.

(3) The balance quota per quarter and fund holder always amounts to 25 percent of the annual balance quota. This does not apply if the Ministry for Ore Mining, Metallurgy and Potash decides on another quarterly distribution with regard to products of the state plan and ministerial balances in agreement with the State Planning Commission and the supply sector, or if supplies (including blanks) originate from imports. In the latter case the quarterly quotas in effect in international economic relations also apply at home.

(4) The supply sector must determine the state plan targets materials consumption and stock volume as per Paragraph 3.

Article 6

Breakdown by the Supply Sector

- (1) The supply sector breaks down the state plan targets of the state assignments to its fund holders and, within 2 weeks from receipt of the state assignments, notifies the Ministry for Ore Mining, Metallurgy and Potash and the balance assigned combine.
- (2) Within 2 weeks of reconciling the demand with the Ministry for Ore Mining, Metallurgy and Potash from the aspect of the annual plan draft, the supply sector must convey to the Ministry for Ore Mining, Metallurgy and Potash and the balance assigned combine the breakdown of the minuted balance quota to the fund holders.
- (3) On the basis of the state plan quotas, the supply sector breaks down the state plan targets balance quota, materials consumption and stock volume, for its fund holders, subdivided per quarterly quotas as per Article 5 Paragraphs 3 and 4. In so doing it takes into account the quotas already assigned for the first quarter and ensures the complete satisfaction of the demand for the economic guarantee of national defense and priority services and assignments. The supply sector notifies the Ministry for Ore Mining, Metallurgy and Potash of the breakdown of state plan targets within 2 weeks from receipt of the state plan quotas.

Article 7

Breakdown by the Fund Holder

- (1) The manager of the fund holder must completely break down the state plan targets listed in Article 6 to the eventual users. At this time he must ensure that the demand for the economic guarantee of national defense and priority services and assignments is met in every case.
- (2) Balance quotas are issued for the total procurement. The fund holder must notify the balancing or balance assigned combine of the division into direct and stock procurement within 2 weeks of the receipt of state assignments. The final division into direct and stock procurement by the fund holder proceeds in the course of the preparation of the plan draft, following consultation with the balancing or balance assigned combine. Changes in direct and stock procurement in the course of plan implementation must be agreed between the fund holder, the balancing or balance assigned combine and the trade in means of production no later than 4 weeks before the assigned date for orders for direct procurement.

Assurance of Planned Supplies

Article 8

Tasks of the Fund Holder

- (1) The manager of the fund holder must ensure that customers' orders do not exceed the quarterly quota as per Article 5 Paragraph 3 and observe the breakdown into direct and stock procurement.

(2) The manager of the fund holder must make sure that orders are placed so as to take into account the development of stocks at the users. When stocks exceed the state normatives, the fund holder must prove to the balancing or balance assigned combine within 4 weeks at the most, that materials consumption will increase correspondingly in the subsequent quarter.

(3) If the orders by a fund holder sector exceed the quarterly quotas allocated him or the coordinated breakdown into direct and stock procurement, the fund holder must--not later than the 4th working day from receipt of the request by the balancing or balance assigned combine or the trade in means of production--decide what orders need to be returned.

(4) If, in a fund holder sector, actual consumption falls below the state plan target materials consumption in a quarter without the respective material funds having been returned to the balancing or balance assigned combine, the fund holder must prove to the balancing or balance assigned combine within 4 weeks from the end of the quarter, that materials consumption will increase correspondingly in the subsequent quarter.

Article 9

Tasks of the Balancing or Balance Assigned Combines

(1) If the fund holder fails punctually to arrive at a decision as per Article 8 Paragraph 3, the balancing or balance assigned combine or the trade in means of production must decide on the return of orders. This decision is considered agreed.

(2) If the fund holder fails to provide proof as per Article 8 Paragraphs 2 and 4, or fails to do so correctly, the balancing or balance assigned combine must suggest an appropriate cut in the balance quota to the Ministry for Ore Mining, Metallurgy and Potash, if need be accompanied by submission of proof as per Article 8 Paragraphs 2 and 4, supplemented by its own comments. The Minister for Ore Mining, Metallurgy and Potash decides on a possible cut in the balance quota in consultation with the manager of the supply sector (for products of the state plan nomenclature in consultation with the State Planning Commission).

Section III.

Business Contracts

Article 10

Annual Contracts

(1) To ensure supplies by utilizing the opportunities of international socialist cooperation, to ensure the prompt availability of blanks and arrange for inclusion of the demand in the production program of manufacturers and the yield of foreign and domestic trade, performance and import contracts for the annual demand (hereinafter designated annual contracts) are to be concluded for constantly recurring sales and supply relations (regular relations). The agreed volume of deliveries must not exceed 80 percent of the balance quota of the set balance.

(2) The general director of the balancing or balance assigned combine is authorized to decide whether an annual contract is to be concluded.

(3) These annual contracts must be concluded on the basis of state assignments for the following plan year. The contract must include stipulations regarding the assortment, quantity, quality, delivery cycle and--unless earlier determined by a coordination contract as per Paragraph 4--the procedure to be adopted for the possibly necessary precise definition of the performance and the period of performance.

(4) The procedure of the more precise definition of the performance and period of performance should be agreed in product-specific terms in coordination contracts between the manager of the balancing or balance assigned combines and the manager of the fund holder; in the case of imported materials with the cooperation of the foreign trade enterprise and in the case of stock procurement with the cooperation of the trade in means of production. Article 3 Paragraph 2 applies *mutatis mutandi*.

(5) The customer must submit to the balancing or balance assigned combine² or the competent central allocation department of the trade in means of production the orders as set out in Article 16

for domestic output and stock procurement	by 30 August
for SW [socialist monetary area] import materials	by 15 June

of the year preceding the plan year. Article 11 Paragraph 3 applies *mutatis mutandi*.

(6) Annual contracts must be concluded between customer and supplier (direct and stock procurement) or between customer and foreign trade enterprise by 30 November of the year preceding the plan year. The import enterprise designated as per Article 32 Paragraph 3 of the Third Implementing Decree of 25 March to the Contract Law--Business Contracts on Exports and Imports--(GBI I No 16 p 333) must conclude the annual contract with the customer by 15 December of the year preceding the plan year.

Article 11

Direct Procurement in the Quarter

(1) Only the minimum order quantities designated in Appendix 2 to this order (or more) may be ordered for direct procurement. Lesser quantities must be ordered from the trade in means of production.

(2) If supplies are not obtained on the basis of performance contracts as per Article 10 and 13 or by other methods agreed as per Article 3, orders for direct procurement must be placed with the manufacturer at least 2 months before the beginning of the desired delivery quarter with respect to the products listed in Appendix 1 of this order, with the balance assigned combine at least 3 months before the beginning of the quarter.

(3) The balancing or balance assigned combine decides the assignment of the order to the manufacturer or foreign trade enterprise and supplier country on the basis of the quarterly quota and taking into account international delivery relations and the manufacturers' production programs. The assignment is a condition of the conclusion of the performance contract.

(4) The balancing or balance assigned combine must advise the fund holder 3 weeks before the beginning of the quarter if an order has not been assigned or was amended before assignment.

(5) The manufacturer designated in the assignment must conclude the performance contract with the customer 2 weeks before the beginning of the quarter for deliveries to be made in the first month of the quarter, by the 10th calendar day of the first month of the quarter for deliveries to be made in the second month, and by the 20th calendar day of the first month for deliveries to be made in the third month. The foreign trade enterprise designated by assignment must conclude the import contract 1 week before the beginning of the delivery quarter.

Article 12

Short-term Demand of Special Urgency

(1) An order may be placed at any time if it involves the assurance of supplies for national defense as per Article 25 of the Contract Law or priority services and tasks as per Article 26 of the Contract Law or on the basis of special occurrences such as breakdowns or fires, and the requirement could not be known by the order dates listed in Articles 10 and 11. In such instances the order must be placed together with a certification note from the fund holder. The latter may issue this only if the circumstances listed above have been verified. At the request of the balancing or balance assigned combine, the fund holder must supply evidence regarding the circumstances. He is obligated promptly to discuss with the balancing or balance assigned combine the resolution of the supply problem within the framework of his balance quota and, taking the cost/profit ratio into account, jointly arrive at a decision.

(2) Once the order has been assigned, the performance contract between supplier and customer must be promptly concluded upon notification of the assignment. In the case of assignment to the import yield, the import contract must be concluded promptly upon the confirmation of the prerequisites for such a contract conclusion.

(3) The performance contract may include an agreement on a surcharge for short-term deliveries appropriate to the costs incurred by the supplier.

(4) Together with the decision on assignment, the amendment or cancellation of performance and import contracts affected must also be decided. The basis for this procedure is represented by Article 24 Contract Law or balance decisions to be arrived at as per Article 16 Paragraph 8, Decree of 15 November 1979 on Materials, Equipment and Consumer Goods Balancing--Balancing Decree--(GB1 I 1980 No 1 p 1).

Article 13

Imported Materials

(1) Orders for the metallurgic products designated in the "list of specific imported materials" issued annually by the Freiberg steel advisory agency must be submitted to the balancing or balance assigned combine²

by 15 June of the preceding year for the first half of the subsequent year, and by 15 December of the preceding year for the second half of the subsequent year.

For regular relations the order dates of Article 10 Paragraph 5 apply. For the direct procurement of

Steel pipes, second processing stage	(ELN No 121 80 000)
Iron, manganese, chromium ores	(ELN No 121 11 100
	121 11 200
	121 11 300)
Nonferrous metal billets	(ELN No 122 31 000
	122 32 000
	122 33 000)
Semifabricated nonferrous metal materials	(ELN No 122 51 000
	122 52 000
	122 53 000)

the order must be placed by 15 June for the entire following year. The conclusion of import contracts takes place 2 months before the respective delivery quarter.

(2) For the metallurgic materials designated in Part II of the "list of specific import materials," issued annually by the Freiberg steel advisory agency, orders must be submitted to the balancing or balance assigned combine² as per the instructions given by the agency

by 15 June or 15 September of the preceding year for the first half of the subsequent year

and

by 15 December of the preceding year or 15 March of the current year for the second half.

Orders for stock procurement must always be placed 2 weeks before the dates listed in Paragraphs 1 and 2 with the competent central allocation office of the trade in means of production.

(3) The balancing or balance assigned combine must promptly notify the customer if it amends or supplements the order data for the object of the performance. The determination of the balancing or balance assigned combine is binding unless the customer appeals the decision within 6 calendar days from receipt of the notification.

Article 14

Stock Procurement via the State Enterprise Metallurgy Trade

(1) The supply of metallurgic products for stock procurement proceeds via the VE /state enterprise/ Metallurgy Trade unless, for certain products or customers, the demand is to be met by other industries or product-specific organs of the trade in means of production.

(2) Orders for stock procurement from the VE Metallurgy Trade are to be submitted to the competent central allocation office of this enterprise

-- At least 6 weeks before the desired month of delivery for products within the framework of the trade program,

-- Two weeks before the order dates listed in Articles 11 and 13 for products not included in the trade program.

(3) Performance contracts are to be concluded 14 days before the desired month of delivery, coupled with the observance of the quarterly quota for stock procurement.

Article 15

Period of Performance

(1) The calendar month must be agreed as period of performance in the performance contract.

(2) If international supply terms or contracts recognized by the GDR agree other performance periods for imported materials, or it can be demonstrated that performance periods by months cannot be observed, or procurement is not from stocks, the provisions in the import contract apply in the delivery chain down to the final recipient. In the case of deliveries of imported materials that need to be trans-shipped via warehouses, the agreed period of performance may have added to it an additional 2 weeks of performance period and, if more time is demonstrably and objectively needed, even a maximum of 4 additional weeks.

Article 16

Requirements on Orders

(1) The standard business contract suitable for data processing must be used for all orders.³ If appropriate, the exchange of machine legible data carriers may be agreed. In that case the general director of the balancing or balance assigned

combine and the manager of the fund holder must conclude a coordination contract. Article 3 Paragraph 2 applies *mutatis mutandi*.

(2) The customer is obligated in the order to cite the item number and standardized designation of the central item catalogue; the item number is obligatory for any processing of the order. Orders without these data are not assigned. Article 30 Paragraph 1 of the Delivery Decree is not affected thereby. If no item number is listed in the central item catalogue for the product ordered, this lack must be clearly noted in the order. If the ordered product is procured by importation and not listed with an item number in the central item catalogue, the customer must quote the standards of the supplier country.

(3) The use of other breakdowns must be agreed between the balancing or balance assigned combine and the customer or fund holder if this serves more efficient data processing.

(4) A separate order must be placed for each item number. If the proper conditions are met, the placement of multiple item orders may be agreed in a coordination contract concluded between the general director of the balancing or balance assigned combine and the manager of the fund holder, in the case of imported materials with the cooperation of the foreign trade enterprise. Article 3 Paragraph 2 applies *mutatis mutandi*. In case of stock procurement, the coordination contract must be concluded between the trade in means of production and the customer.

(5) If nonferrous metallurgical products are ordered, the annotations required must be made on the order as per Order of 1 November 1982 on the Use of Nonferrous Metals and Semifabricated Nonferrous Metals--State Use Instruction--(GBI I No 38 p 620). Each order for such products must include the fund holder's annotation on the observance of the balance quota.

(6) The customer is committed to his order (contract offer) until the date stipulated in this order for the conclusion of contracts.

(7) The customer must apply for cancellation of an order to the competent balancing or balance assigned combine. The same applies to the offer to cancel a performance or import contract. In that case the customer must at the same time notify the supplier.

Article 17

Concluding Provisions

(1) This order takes effect upon publication and is to be applied in 1983 for the preparation of the 1984 plan and orders for the 1984 plan year. Article 13 Paragraph 2 is to be applied for the first time for orders of imported materials for the 1985 plan year.

(2) Losing effect on 31 December 1983 are

-- Order of 6 February 1970 on the Supply of Metallurgic Products to the National Economy--Metallurgy Supply Order--(GBI II No 22 p 163),

-- Order No 2 of 10 May 1971 on the Supply of Metallurgic Products to the National Economy--Metallurgy Supply Order--(GBI II No 47 p 363).

FOOTNOTES

1. See Articles 4 and 5 of the Order of 2 July 1973 on the Steel Advisory Agency (GBI I No 33 p 346).
2. In effect are the styles of the balance catalogue.
3. For direct procurement Business Contract (Delivery Contract) Form A 4 ZPD No 510-001. For stock procurement Business Contract (Delivery Contract) Form A 4, ZPD No 510-010.

Appendix I to the preceding order

Products to be Ordered at Least 3 Months Before the Quarter as per Article 11 Paragraph 2

ELN	Designation
121 00 000	All products of brand of steel main group 4
121 71 000	Plated steel plate and strip and steel plate and strip with metal coating
121 72 000	Bright turned and draw bar steel
121 73 700-900	Spring-steel cross bands
121 76 000	Drawn steel wire, circular and coiled
121 77 000	Surface finished steel plate and strip, cold rolled, organically coated
121 78 000	Surface finished light steel sections and corrugated sheets, cold formed
135 76 001	Steel wire rope (excluding conveyor belts)
135 76 006	Steel wire rope for conveyor belts
122 51 100	Copper semifabricates with the exception of 122 51 150 Fine copper wires, up to 1.39 mm 122 51 160 Coarse copper wire, from 1.40mm (including flat and trolley wire)
122 51 200	Semifinished brass goods
122 51 300	Semifinished bronze goods
122 51 400	Semifinished nickel silver goods

ELN

Designation

122 53 100	Semifinished aluminum and aluminum alloy goods exception
	122 53 160 Aluminum and aluminum alloy wire
	122 53 195 Corrugated aluminum and aluminum alloy plate
122 53 200	Semifinished magnesium alloy goods
122 57 200	Iron plate and strip, nickel plated
122 57 300	Aluminum plate and strip, copper plated
122 57 900	Other semifinished goods of plated materials
122 58 300	Technical resistance metals
122 58 500	Metals for thermocouple elements and compensating pipe
122 59 100	Tube installation materials made of nickel and nickel alloys
122 59 200	Tube installation materials made of metals other than nickel and nickel alloys
122 59 300	Corrosion and heat resistant materials

11698

CSO: 2300/125

GERMAN DEMOCRATIC REPUBLIC

BRIEFS

PRIVATE ENTERPRISE IN SCHWERIN--The Chamber of Commerce of Schwerin Bezirk numbers 1,045 members. Among them are 312 retail establishments, 291 restaurants, more than 200 transport enterprises--from taxis through horse-drawn carriages to Eibe tugboats--but also showmen, hotels and pensions, lottery agencies, boat rentals, beekeepers, plant nurseries, collection places for secondary raw materials, coal dealers, gas station owners or tax consultants. Private retailers and restaurateurs are responsible for 10 percent of the commodity turnover in our bezirk. Sixty new applications were registered with the Chamber of Industry and Commerce this year, the majority of which were in the area of the catering trade. Especially in rural communities, citizens may look forward to new and reopening establishments. Our state supports this development through generous credits at favorable interest rates. [Excerpt] [Schwerin SCHWERINER VOLKSZEITUNG in German 28 Oct 83 p 2]

CSO: 2300/134

BRIEFS

GOODS EXCHANGE WITH CSSR--In Budapest an agreement was signed on Hungarian-Czechoslovak goods exchange for internal trade assortment diversification. According to this next year the enterprises of the two countries will deliver consumer goods worth 10 billion forints. [Text] [Budapest Domestic Service in Hungarian 1400 GMT 28 Oct 83 LD]

EXCHANGE OF INTERNAL TRADE GOODS--Ferenc Lauthan, Hungarian deputy minister of internal trade, and Ladislav Somogyi, Slovak deputy minister of trade, reached agreement today on Hungarian-Czechoslovak exchange of internal trade goods designed to enhance variety in the shops of the two countries. Next year we shall buy from Czechoslovakia a larger quantity of ready-made clothes, knitted sport dresses, wood sheds and radiators, in return for overclothes, textile by the year, toys, furnitures and various beverages. [Text] [Budapest Domestic Service in Hungarian 1600 GMT 28 Oct 83 LD]

ELECTRONICS AGREEMENT WITH CSSR--Budapest, 28 October (MTI)--The Hungarian-Czechoslovak work group of electronics held a session in Budapest 26-28 October to review the possibilities of cooperation. At the end of the meeting the two delegations signed an inter-governmental agreement of cooperation in the organization of the joint production of electronical components, various technological equipment and basic materials, mutual delivery and technical-scientific cooperation. The accord is a general agreement which concrete contracts to be concluded between the two countries' companies in the coming months, will specify. The general agreement stipulates the delivery of 21 million roubles worth of Czechoslovak and 19 million roubles work of Hungarian integrated circuits, semiconductors, active and passive electronical components, special technological machine lines and telecommunication material. The Hungarian-Czechoslovak inter-governmental cooperation agreement was signed by Hungarian Deputy Minister of Industry Zoltan Koteles and Czechoslovak Deputy Minister of the Electrotechnical Industry Karol Horvath. [Excerpts] [Budapest MTI in English 28 Oct 83 LD]

WATER TALKS IN CSSR--Antal Kovacs, state secretary and chairman of the national water power and hydraulic engineering bureau, has held talks in Czechoslovakia about Hungarian-Czechoslovak cooperation on water management and the work concerning the Danube River barrage under construction. Together with Vladimir Margetin, Slovak minister of forestry and water conservancy, together with Vladimir Margetin, Slovak minister of forestry and water conservancy, he visited

the construction sites and the waste water clearing plant which has been built by Hungarian enterprises in Slovak. [Text] [Budapest Domestic Service in Hungarian 2100 GMT 28 Oct 83 LD]

GOODS EXCHANGE WITH DPRK--Representatives of Hungary and the DPRK have signed an agreement for the exchange of goods in 1984. In accordance with the agreement, Hungarian foreign trade is to deliver, among other things, medical appliances, telecommunications equipment, buses and pharmaceuticals and in exchange, buy from its partner machine tools, components, non-ferrous metals and consumer goods. [Text] [Budapest Domestic Service in Hungarian 1400 GMT 27 Oct 83 LD]

TALKS WITH NEW ZEALAND--Budapest, 26 October (MTI)--Wednesday on the last day of the session of the Hungary-New Zealand mixed trade committee the two delegation heads: Hungarian Deputy Foreign Trade Minister Tibor Melega and E. A. Woodfield, deputy minister of trade and industry of New Zealand, signed a protocol. The session reviewed existing and prospective export possibilities on both sides. The main Hungarian export items are railway and power station equipment, buses, trucks and medical instruments and New Zealand agricultural systems, animal husbandry methods, basic and auxiliary materials of the dairy industry, motorboats and wool processing equipment. The parties agreed that besides further developing bilateral trade, possibilities in third market cooperation are also to be tapped. The session reviewed economic question of general interest and third market cooperation possibilities. [Excerpts] [Budapest MTI in English 1728 GMT 26 Oct 83 LD]

WATER MANAGEMENT PROTOCOL--Hungarian and Yugoslav water management authorities, in addition to flood defense, will cooperate in the protection of the environment in the future. This was confirmed by the signing of a protocol by experts of the two countries. The signing took place in the Yugoslav town of Osijek. [Summary] [Budapest Domestic Service in Hungarian 1600 GMT 28 Oct 83 LD]

LOSONCZI TOURS SOMOGY--Pal Losonczi has concluded his visit to County Somogy. The member of the Politburo and president of the presidential council started his day today in the Kaposvar meat combine. Leaders of the meat industry trust have said that the combine's annual production is over 3 billion forints. Export is also significant; it will be overfulfilled this year by about \$1.5 million. Pal Losonczi then visited the Beke agricultural cooperative in Tab. The 6,000-hectare farm has unfavorable conditions, but it still makes a profit. [Text] [Budapest Domestic Service in Hungarian 2100 GMT 27 Oct 83 LD]

CSO: 2500/96

ADVISORY COUNCIL CRITICISM OF POLICY DECISIONS REPORTED

Krauss in TRYBUNA LUDU

Warsaw TRYBUNA LUDU in Polish 6 Oct 83 p 5

[Article by Krzysztof Krauss: "There Is No Macro-Efficiency Without Micro-Efficiency. A Meeting of the Economic Advisory Council"]

[Text] Work on the Central Yearly Plan for 1984 is entering its final stages. Soon, decisions will be taken on the final form of the projected modifications of certain mechanisms and instruments of the economic reform which will become binding next year.

In connection with this, during the next few days, the Economic Advisory Council plans to present to the government and to public opinion the next synthetic document characterizing the position of the council on such issues as the functioning of the economic system and certain problems of the economic situation. The meeting of the Economic Advisory Council, chaired by Prof Czeslaw Bobrowski, was devoted to a discussion of the draft of such a report.

The document being prepared by the council emphasizes that the basic goal of the reform is to increase the efficiency of the economy on the so-called macro-level. This goal, however, cannot be achieved without an increase in the economic efficiency on the micro scale, that is, in the individual enterprises. However, an increase in the efficiency of the economy on both of these levels depends not only on the correctness of systemic solutions expressed in statutory rules, but also on objective conditions (internal and external, including sociopolitical factors), on the form of economic plans, and on the current political and economic regulations. Unfortunately, this assumption is not always consistently observed.

It was emphasized during the meeting that central plans should not violate the logic of action of the basic systemic solutions, nor should they decrease the extent of autonomy of the individual enterprises. On the other hand, it would also be an error to assume that systemic solutions can be entirely independent of the results of the planning process. It was asserted that the establishment of a new relationship between the plan and the functioning of the economic system requires essential changes in the central planning itself. Among other

things, this refers to an increase of the range of research works prepared during the stage of formulating the plan's assumptions, greater utilization of opinions, surveys and works done by independent research centers in the planning itself, a more consistent utilization of possibilities created by social consultations on fundamental problems to be addressed in the central plan. The informational function of the central plan for individual enterprises should be strengthened, something which at this moment is not a fully realized principle. During the discussion, participants cited examples of incompleteness and lack of honesty of the material-supply budgets, of the too narrow range of simulation studies which sometimes precede important decisions concerning the so-called instrumentation of the plan.

There were many critical remarks about the wage-income policy implemented by the center, which often had a much greater effect on the inflationary processes than any abuses of rights by the enterprises. There were also many critical remarks about the present price policy, about certain tendencies in the investment policy, etc. For example, some participants in the discussion claimed that the recent review of investments which had been discontinued did not limit the extent of investments, decrease financial involvement and accelerate necessary changes in the structure of the national economy, but rather increased this involvement and caused further scattering of efforts and means.

The increase in various kinds of "reductions" and "preferences" is worrisome since it impedes the proper functioning of the economic mechanisms put in place by the reform. The participants in the meeting were informed that a special commission nominated by the government will address this issue, since the current state in this area is considered as disquieting also by the leading state organs.

During the meeting, the council agreed on the direction of its continuing work.

In the coming weeks, they are to focus on, among other things, issues of the relationship of the plan to the systemic solutions, the problems of pricing and income policies, wages and market equilibrium, agriculture, foreign trade, investment activities, space economy, housing and construction, tax issues, and the introduction of the so-called early warning system. An important area of work for the Economic Advisory Council in the nearest future is to be also the formulation of the attitude of the council towards the project of the plan for the next year being prepared by the Planning Commission.

ZYCIE WARSZAWY Report

Warsaw ZYCIE WARSZAWY in Polish 6 Oct 83 pp 1, 2

[Article by (Ch): "The Meeting of the Economic Advisory Council. Effectiveness of Expert Opinions. Creative Discussion. Against the Danger of Bureaucracy."]

[Text] The plenary session of the Economic Advisory Council, chaired by Prof Czeslaw Bobrowski, which took place on 5 October, was devoted to two basic issues: discussion on the progress of work on the changes in the functioning of the economic system beginning next year, and on the position which this advisory body is to take towards further works of this type

The second part of the discussion was devoted to the program of the council for the near future, and this is an extremely rich portion since it concerns the pricing and income policies, investment equilibrium, agriculture, as well as other issues important for the functioning of the economy.

For a journalist observing the course of discussions, this was a lesson on the advisory organ of the government, new to our practice, which was nominated in order to present its own opinions on the most important economic issues without being dependent on various command centers.

The first part of the meeting was devoted basically to a retrospective view of what the council had managed to achieve, and, at the same time, it was an evaluation of the effectiveness on practical activities of opinions, propositions and reports that had been elaborated. This was expressed in the topics listed by the general secretary, Dr Wieslaw Rydygier, especially in the context of the recent meeting of the Council of Ministers devoted to the functioning of the economic system.

The abundant harvest of the works of scholars and practitioners in the Economic Advisory Council already began to exert an influence on decisions which are being made. It is not always a direct influence. Nevertheless, many suggestions were included in the official documents, many issues were introduced in the form of additional variants, certain suggestions induced further analytic work, for example, by the nomination of a government commission which will verify tax reductions. Many examples were cited.

What is, however, the overall evaluation of effectiveness? The statement that both much and little was achieved at the same time was made during the deliberations. This concerns both the functioning of the economic system and the formation of economic policy.

Professor Bobrowski addressed several selected issues. Basically, this was a dispassionate reflection on the effectiveness of the reform and on impatience, which means that results which could not have yet been achieved are expected. This is why there is a feeling of disappointment that only that much was achieved which leads to the introduction of too many adjustments and corrections, adding a set of regulations that are too bureaucratic and complicated and creating--were there to be no counteraction--real dangers of the growth of bureaucracy and of the system of control for everything that cannot be controlled. These dangers are not at all concerted and abstract.

Therefore, in the draft of the document presented to the participants, it is important--as it was formulated--to consider systemic issues taking into account the existing conditions. One has to be aware of the fact that a sober look at the possibilities of the reform from its very origins did not allow us to expect its full effectiveness in less than 3 years. At the same time, participants in the meeting addressed the basic condition, indispensable for the stimulation of efficiency in the enterprises, that is, the proper relationship between the plan and the planning process, on the one hand, and the existing system of the functioning of the economy, on the other.

It is important that the central plans do not violate the logic of the basic systemic solutions and do not limit the extent of the autonomy of the enterprises assumed by the reform. Without a certain degree of freedom of action, which is, in any case, seriously limited by supply shortages and investment difficulties, it will not be possible to stimulate adaptive and efficiency processes on a large scale. Thus, what is needed is a new arrangement of this relationship between the plan and the system, which also requires changes in planning itself.

Much attention was devoted to the problems of prices, wages and equilibrium. Both the price "allergy" and the wage "allergy" were noted. Prof Lesz used this opportunity to point out that the increase in wages is taking place largely through the extension of work on free Saturdays. How the situation changes. According to the information provided by Prof Lesz, in light industry, in some enterprises, one can observe an excess of those willing to work on free Saturdays. There are even drawings to decide who will be able to work on these days. This is a result of double wages, but also of the fact that shelves in the stores are a little fuller, and people want to earn money.

Also interesting were the remarks made during the discussion about taxes, investments and the distribution of amortization.

During the consideration of individual topics there was no lack of different opinions, polemics and arguments. How important it is that so many individual personalities, despite their differences, can reach agreement on basic reports to such an extent that they represent the positions of the entire council! And, it is also important that the views on the majority of matters are presented to the public, since the council publishes most of its reports. Perhaps the effectiveness of this group is not as great as the needs of our difficult situation require, but the practice demonstrates without any doubt that a number of hurried or badly prepared decisions had been stopped, while others were given a better direction.

Can there be a greater satisfaction for advisors than the knowledge that their opinions are carefully listened to and that they have an impact?

12495

CSO: 2609/130

PRON ACTIVISTS CHALLENGE MINISTER ON ECONOMIC POLICIES

Warsaw OODRODZENIE in Polish No 2, 25 Oct 83 pp 4, 7

[Text] The country's socio-economic situation was the subject of a lecture given by Deputy Chairman of the Government Planning Commission, Minister Andrzej Karpinski at a recent seminar for voivodship-level PRON activists, held in Warsaw on 16-18 September. Below are excerpts from the transcript of ensuing discussion. It shows that many decisions of the government give rise to serious controversy among PRON activists.

Voice from the floor: Hearing you, Minister Karpinski, one could get an impression that the government complains of reverses of fortune that prevent it from producing satisfactory economic performance. But the government has been vested with any instruments it wanted--and these are powerful instruments. There have never been any objection from the Sejm.

Answer: The economic reform is a complex operation, affecting the economic and motivational systems. It would be hard to find any example in the world of new system of management being introduced overnight and functioning without changes. The Hungarians have been launching their reform since 1968, and they still criticize it and make changes. It would be wrong to expect that a year after its introduction, the reform will effectively respond to all complexities of economic situation.

It is our opinion that the period up to 1985 will be one of shaking down and experimenting. In the next five-year period [1986-1990], we want the principal parameters and categories of reform to be empirically tested and more stabilized. Therefore we should critically assess all the mechanisms introduced as part of reform--until practice proves their efficacy. This is the most important, in fact the only, criterion of truth. What's use of textbook arrangements which do not stand the test of reality?

It should also be remembered that the reform was introduced in a highly unfavorable situation. We all realized that our system of management was rigid and that it did not provide conditions for initiative and innovation. Its greater flexibility was our only option. But it is not the goal of reform to totally replace central planning and management with market

mechanisms. The essence of reform consists in the attempt at making broader use of the latter. As suggested by past experience these are the most efficient instruments motivating individuals and human collectives.

But the market mechanisms will work smoothly only in a normal market. There is no need for repeating that ours is far from normal. It is unbalanced, and hit by severe shortages. That is the reason why the reform will have to be perfected for many years ahead.

Voice from the floor: Could you dispell the fears the instruments employed by the government--which in nature are administrative as well as economic--undermine the principles of reform? In particular, I am interested in worker self-management and its influence on policies of industrial enterprises. Self-management, after all, is one of the pillars of economic reform.

Another voice from the floor: The recently-passed law on temporary introduction of compulsory labor exchanges is already in force in 15 voivodships, that is on a large proportion of the country's territory. Will this decision help attain the goal it purports to serve, namely the rationalization of employment? Compulsory labor exchanges were opposed by all those consulted. I am now interested in one thing: will this instrument bring about the desired effects?

Answer: In the light of what I just said, the now-introduced changes do not undermine the principles of reform. It is true that in some, very few fields--investment capital, labor exchanges, material savings--we also draw, but not exclusively, on administrative instruments. Why? Because as a result of market disturbances we have found ourselves in an absurd situation.

If the government, or the center, is to avoid criticism of standing idly by, then it must resort to such means as are available. We all know that the compulsory labor exchange is hardly an efficient tool. To some degree, it violates the principle of enterprise autonomy. It can be proved that both technically and in terms of merits this is not the best solution. But did we have any alternative? Would it be better for the economy if the sophisticated plant and equipment bought in the 1970s for hard currency now stood idle on account of labor shortages, in a situation where workers leave precisely these factories where it is installed? At stake is the unquestionable public interest. Having mastered sophisticated processes, and experiencing no problems with raw materials for them, we may not confine benefits from these processes to just one shift. So we are forced to resort to administrative measures, even if we realize that they are of temporary nature.

Were these measures superfluous? Could their goals not be attained through the mechanisms of economic reform? The answer would probably be "yes" if only enterprises were guided by exclusively economic motives. But as matters stand, each economic phenomenon has its social aspects as well.

In economic terms, the 1982 situation could be characterized as follows: industrial output down 15 percent, employment unchanged. This means that there was no work for 15 percent of the workforce. A normal reaction of enterprises would be that in the name of profit, or the improvement of financial result, they adjust the level of employment to the lower level of production. Because of social constraints, however, that did not happen. In many cases, people were thinking as follows: we don't want an increase in average pay if this were to make our colleagues redundant and put them in trouble.

This was an attitude to be reckoned with. We had to take into account anti-redundancy sentiments, even though this might be economically warranted. But on the other hand--knowing that people, in line with their aspirations, will choose those jobs which are best paid--we had to apply, for a transitional period, a protective umbrella over those sectors of the economy which supply the most urgent social needs.

All this indicates that employment rationalization is a very difficult matter--much more difficult than could be expected. But there is no tendency to restrict powers of worker self-management on this account.

Voice from the floor: Take the issue of inflation. The [three-year] national Socio-Economic Plan provides for a 15 percent rate in 1983. To many, this figure seemed unrealistic already in 1982, when the plan was compiled. Now we know that the inflation rate will reach at least 25 percent. So, how do we plan? On what assumptions? The wage fund increased in the 8 months by 33 percent. But there are enterprises which do not contribute to the FAZ, and which operate virtually under the command-and-quota system, with strong interference from the center, and there the wages increased 70 percent. What sort of central control is this?

Answer: The reform is based on the assumption that enterprises cover pay rises with means earned by themselves. If the market were under control and saturated, and if price control could be enforced exclusively through market mechanisms, such an increase in wages would probably not happen. But as long as enterprises can boost financial incomes through price rises rather than production growth they will accumulate huge funds that can be spent on pay increases. Against this background a real problem emerges: should we violate the reform and turn back to administrative methods? As shown by experience, this is a road to nowhere. We must find methods which would permit continued enterprise autonomy while at the same time eliminating some adverse phenomena in wage-fund management, manifesting themselves in the rupture between increase in wages and increase in labor productivity. It is the line we follow in working on the corrections of reform.

We also want to influence prices, that is to intensify price control. We want to influence enterprise money. The enterprise must share the financial accumulation with the state budget, since it is the state which shoulders the great, and growing, burden of welfare expenditures. This end is to be served by the system of taxation and the principles of profit sharing.

If we decide to leave enterprise autonomy intact and curb the price movements mainly, if not exclusively, with the help of indirect economic instruments--an option which I favor personally--then it must be stated that the available opportunities are limited. One possible way is along the Hungarian lines, with the permitted level of price increase being fixed at several percent. Above that ceiling, very strong tax mechanisms are set in motion. But that system works irrespectively of the level of production. It is said: "We can afford pay increase by a certain percentage. He whose pay rises below that limit is not taxed. But when exceeding the ceiling he must be prepared for severe financial consequences." This solution is pretty efficient, and is applied also in several other socialist countries. But it should be remembered that it is deflationary in nature, and as such does not favor production growth. It makes people think: "Why should I increase production if I am to be granted pay increase by a certain percentage irrespectively of what I am doing?"

Eventually, the deflationary measures may prove imperative, but in our conditions they are in exceptionally stark conflict with the requirements. After all, what do we need most at present? Production growth. That is why, in our system, the [tax-free] wage fund is linked to the level of production.

It would be all right if the adopted rules were not circumvented or distorted in practice. Under our system, pay rises are linked to increase in net production [produkcja netto], that is the increase in so-called value-added production [produkcja dodana]. There is a tax-free threshold above which the adjusting coefficients [wspolczynniki korygujace] define the progression of FAZ contributions. This should work very well, but it doesn't. Why? We have noticed a wide scope of manipulations in calculating the increment of net production above the base-year level. In some enterprises, a 7 percent increase in production--which is the true result of the workers' effort--is coupled by a 20-30 percent rise in sold production, coming as a result of various sorts of accounting manipulations.

The cost of all this is the distorted pattern of the supply of goods and money on the market. Therefore, in a prudent way, guided by the desire not to undermine the principles of reform, we should take more energetic steps towards containing inflation and destroying its sources. We want to heal the situation with means compatible with the principle of enterprise autonomy. Next year, FAZ progression will be sharpened, and the tax-free threshold will be lowered. Concessions for occupational groups--of which there are too many--will be reduced.

Summing up, the government is taking firm measures in four directions: greater control over pricing procedures, more stringent criteria for FAZ contributions, fewer scope of FAZ concessions, and control over production-increase computations. But we cannot afford at the present moment to abandon motivation stimulating production growth.

Voice from the floor: What is the objective of the FAZ? Enterprises perceive it as a hidden form of taxation.

Answer: The FAZ rested on the assumption that, for economic reasons, enterprises would adjust the level of employment to the lower level of production. That did not happen. Despite surplus labor in many enterprises, there is no supply of spare labor in the economy as a whole. So the FAZ [Labor Redeployment Fund] cannot be used as originally planned. Proposals are being put forward that, just as in Hungary, FAZ contributions should be considered a tax on wage increase. This is the role it actually plays. But we decided that this should be done hastily.

At present, the FAZ is a budgetary deposit [lokata budżetowa], which serves to finance requirements connected with vocational reorientation of the workforce. We increasingly draw on the FAZ in financing factory school network--in a situation where more and more factories have troubles with funding their vocational-training establishments which they have run for years.

Voice from the floor: How do you assess the consequences of cutbacks on capital-equipment purchases for the prospects of technological change? Are we not threatened with stagnation in technological progress in years to come, which would further broaden the technological gap between Poland and the technological gap between Poland and the developed countries?

Answer: This is a serious and difficult problem. All over the world, technological progress is connected with capital investment. Since 1976, we have taken the road of limiting investment in order to protect consumption. In 1980 and even 1981--with national income tumbling down--the level of consumption did not drop. The reason why it was possible was that the share of investment in national income was drastically reduced. While in the mid-1970s, Poland had on the world's highest investment-to-national income ratios, now after 6 years of investment cutbacks we reached a point where we can go no further. The Sejm and the government opted for the variant of the 3 year plan which clearly reflects the desire to protect consumption, even at the expense of investment. While the latter is to grow 5 percent in the 3 years, the figure for consumption is 9 percent. This means that, on the national scale, consumption is to grow twice as rapidly as investment.

A question arises as to whether it will be possible to continue this pattern after 1985. I believe it will not, because the instances, and even processes, of decapitalization are increasingly making themselves felt. Already now, investment is lower than annual depreciation charges--which reflect the minimum replacement requirements--in 10, quite large branches of the economy. In other words, we are sliding back to the stage of simple reproduction. And how are we going to repay foreign debt with an antiquated, unmodernized industry?

For that reason, we are in for a major reorientation in the investment field. But let no one cherish illusions that we will return to the old model of

investing. Never. This is a matter of the past. At least in this century. We will not turn back to the model of investing in which 70 percent of investment resources was absorbed by the construction of new factories at new building sites. All over the world, it is the replacement and modernization projects that absorb 70 percent of capital spending. In Poland, this pattern was reversed. Thus we have to invest more, but mostly in replacement and modernization, rather than new projects.

Voice from the floor: What is the government's position on the issue of enterprise associations--both voluntary and mandatory. We are concerned about the tendency to distort the idea of associations, about price collusions and monopolistic practices. The associations attempt to force their own personnel and production policies on enterprises.

Answer: The Economic Reform Commission plans to devote more attention to organizational structures in the national economy and within enterprises. As for the latter, we thought it proper that such complex problems as simplification of organizational set-up, the ratio of factory to office workers, etc., be tackled by self-management bodies which are vested with requisite powers (naturally, with the exception of limitations imposed recently for the period of overcoming the crisis).

But as it turned out, activities in this field are hardly noticeable. Once, at a meeting, I was approached by a miner and asked: "What is the government doing to cut down administrative employment at enterprises?" Well, if we opted for enterprise autonomy then it is the enterprise itself that should shape the organizational structure on its own. This is not only our problem. Despite the unpopularity of such measures, some socialist countries had to impose normative standards for the ratio of managerial personnel to total enterprise workforce. Next year we, too, will have to take a closer look at the organizational structures. Generally speaking, the Polish economy is marked by excessively expanded horizontal structures, and underdeveloped vertical structures which integrate production processes from the raw-material to final-product stage.

Next year, the Economic Reform Commission will be working on the statute and powers of voluntary and mandatory associations. It is true that attempts are made at distorting the idea of associations, taking over pricing powers from enterprises, preventing the outflow of information and creating a sort of association monopoly of information. All this threatens with the monopolization of some branches of the economy and with the pushing up of prices command-style control over production is also being enforced. These developments will not be eliminated overnight. We will need some time.

Voice from the floor: There was once much talk about convertibility of the zloty, and about setting in order our financial and balance-of-payments situation. At what stage are Poland's endeavors to join the International Monetary Fund?

Answer: Poland has applied for entry into the IMF but we are blocked by the United States which has the final say in the organization. As I see

It, quick progress can hardly be expected here in some time ahead. Our entry into the Fund would favor the normalization of international situation.

Voice from the floor: We have several hundred halted projects. As Poland cannot afford completing all of them, it has been proposed that they could be finished jointly with other socialist countries. At what stage are the negotiations and actions in this field?

Answer: Around 40 halted projects in Poland attracted the interest of socialist countries. But concrete agreements are few and far between. Poland will again take up this issue upon plan coordination for 1986-1990. At present, next to the lightbulb factory in Pila, completed with Czechoslovak participation, joint projects can be counted on fingers. One positive example is the contribution of Hungary and Bulgaria to the manufacture of color-TV picture tubes. The greatest progress is now in talks with the Soviet Union on the steel and light industries.

Voice from the floor: We are worried by the growing coal inventories. Is it economically warranted to extract coal and store it outdoor where it gradually loses its heating value? Would it not be better to offer this coal for sale, e.g. to the farmers?

Answer: Coal inventories are substantial. But it would be wrong to conclude that we should curb its production. And we can hardly afford to export the whole excess above our current requirements because, being a major supplier on the world market, we could thus press down the already low price.

It now stands at around 40 \$ per ton, as against \$ 65 not long ago. We execute old contracts at old prices, but if we now opted for new contracts the price received would be much lower. Besides, the excess is made up primarily of coal fines. They cannot be sold to the farmers who are rather interested in lump coal. So only a portion of coal surplus could be sold to domestic users. As for the unrestricted domestic sale of coal, we are studying this matter but it needs further consideration. Coal, after all, is an argument in various tie-in transactions with the farmers for produce delivery. Decisions on this subject should not be taken on the spur of the moment. What would people say if we lost the argument motivating farmers to conclude contracts with the state for the delivery of crops and livestock, which are now tied to coal supplies?

Voice from the floor: It is said that our economy is energy intensive. But a reduction of energy content in final output will cost and will require new investment projects. Is the government prepared to accept such projects and modify the tax system accordingly?

Answer: The current rules provide for a 30 percent income relief on account of modernization of energy management. Our desire is to ease the access to credit and grant preferential interest rates--in step with the financial capacity of the state--for those enterprises which embark on fuel- and energy-related modernization projects.

Voice from the floor: The government says we have a low social productivity of labor. I agree with that statement but it seems to me that the problem should be seen through the prism of the capital-to-labor ratio [techniczne uzbrojenie pracy] and, what is increasingly taken up by workers, the proportion between factory and office workers. This after all is just an organizational question.

Answer: The social productivity of labor comes as a result of many complex factors and processes. One of them is the capital-to-output ratio which is lower in Poland as compared with Western countries. But on the other hand we have modern factories with a comparable ratio where productivity is also lower. So there must be some other causes as well.

One important cause is the structure of production which is worse in Poland than e.g. in Western Europe. The countries of Western Europe, with very high productivity, developed many industries which are nonexistent in Poland and which are more efficient in terms of net production--e.g. electronics. Our situation is further deteriorated by the fact that we have oversize organizational structures. There are also other unsolved problems which evidently bring down the level of labor productivity in Poland, such as the low level of mechanization in ancillary processes. Coming as a result is the enormous employment in in-plant transport, in loading and disloading operations, and in public transportation. The loading and disloading operations absorb more than 900,000 persons. Just several years ago, 46 percent of industrial jobs were manually performed, without any degree of mechanization. What is needed is mechanization and complex automation. Those people will then be able to turn to other jobs--to their full advantage. I agree that this is a central problem. We will attend to it in the long-range plan and in the coming five-year plans. In step with overcoming the day-to-day troubles, we will have to devote more attention to issues which are of crucial importance for the future of this country.

CSO: 2600/318

SZELIGA DIAGNOSES PUBLIC PERCEPTIONS OF ECONOMIC ILLS

Warsaw POLITYKA in Polish No 45, 5 Nov 83 pp 1, 6

[Article by Zygmunt Szeliga: "What Might Have Been, What Must Be"]

[Text] By submitting for public consultation the proposed Central Annual Plan targets for 1984, the government--quite naturally--expects public approval for its policies so far and plans for the future. Can this expectation be met, and if so to what degree? An answer to such a question is no easy matter. First of all it has its political aspect, reflected in the attitude towards the government or more generally towards the authorities and the socio-political system. Even though it would be hard to prove a tangible decrease in the number of people unequivocally opposing the authorities and ready to take actions in this spirit, one can safely state that there is better realization of constraints and greater number of people prepared to actively commit themselves on the side of the authorities.

At the same time, however, the divisions outside the political area have multiplied and become more complex and changeable. This is because the individual social groups assess the effects of government policies and its plans through the prism of their own expectations--often much diversified and excluding each other. And the government policies themselves, under various pressures and as a result of objective conditions, are not free from meanderings (this naturally does not apply to the key policy lines which are irreversible). In effect, the public mood, and the approval and disapproval for the government, is going up and down. Let it be noted that only few people base their assessment on a full and comprehensive analysis of realities and policies, while the overwhelming majority go in their judgement by fragments of the whole, often quite irrationally.

In the purely economic area, the added factor influencing the attitudes towards government policies is the low level of society's economic education. Although slightly better than several years ago, the situation here is still very bad.

And the changing nature of economic policy, both incidental and more general (even if totally warranted by, e.g., the need to reconcile the conflicting and mutually ruling out demands and interests) by no means serves the goal of greater economic awareness.

These general notes on the chances of the government draft's getting public approval are well illustrated by the several months' long discrepancy between the objective improvement in the state of the economy, which renders greater approval possible, and the actual public mood which has no doubt deteriorated.

The worsening social climate all around the world has its non-economic causes. The general atmosphere of the fall of 1983, marked by Pershing and Cruise missiles, Warsaw Treaty's counter-measures, and the specter of nuclear holocaust (the greatest in 30 years), overshadows all other problems.

Delays in solving some major issues pose another non-economic problem influencing the public mood. Hopes for such solutions contributed to improving the public climate during the period of martial law. One example are the proposed amendments to the passport law. Progress in relation to the present state of affairs is tangible--but still below public expectations.

The public is waiting for a new bill on election rules [...] [original deletion in the POLITYKA text]. Mention is also due to the grand issue of worker self-management and civic self-government, where the actual practice still seems to breed more disenchantment than satisfaction. And in my opinion, the manner in which the PRON and its agencies are winning an authentic position in the country's political and social life is too much protracted and arduous.

All these and other non-economic problems have been leaving their imprint on the public mood in the fall of 1983. This mood is connected with some dissatisfaction with the economic situation--and this is where we start to get down to the crux of the matter in terms of finding out what these consultations on the 1984 Central Annual Plan are all about.

Let's start with the balance sheet of the 1983 performance. There is a very clear discrepancy--which is nothing new in this country--between the satisfactory objective indicators on the one hand, and on the other the public benefits and the public perception of the state of the economic situation.

Objectively, the state of the economy in 1983 improved tangibly and we indeed seem to have turned the corner. Industrial output is growing slowly yet systematically (although it is still much below the pre-crisis level); agricultural performance is good (owing in large measure to fine weather); and there is a substantial trade surplus (but coupled with drastic import cutbacks) which augurs well for the stabilization of debt level.

The government places emphasis on improvement (although still insufficient) in economic efficiency, raw materials to output ratio, labor productivity, and the maintenance of general monetary/consumer-market equilibrium (but at a much higher-than-expected rate of inflation).

As for the economic sectors of major social importance, particular mention is due to the improvement in housing construction and increase in the number of handed-over flats (although, again, this is much less than before the crisis).

The upturn in economic trends is best illustrated by the most important indicator of the country's economic situation, the national income, which is expected to increase for the first time in four years.

So much for the general balance sheet. A question arises here as to whether or not it could be at least slightly better, considering the objective opportunities. Before answering this question, however, this favorable general balance sheet should be confronted with its public perception both in the objective and subjective plane.

Coming to the fore in the objective plane is the insufficient progress in consumer-market situation. Regrettably, the production of consumer goods, and still more their supply, is growing at a much slower pace than the country's global production. There are at least three causes of this. The first is the structure of our industry, marked by strong undercapacity in its consumer-oriented segments. Little has changed here in the past 2 years, of which more later. Secondly, as compared with investments and production supplies, the consumer-oriented production is much more sensitive to imports (cotton, wool, chemical feedstock, coffee, cocoa, tea, etc.) which despite some emergency decisions are still at a low level, unlikely to go up because of the balance-of-payments situation. Thirdly, for the same reason of balance-of-payments constraints the main chunk of consumer-output growth has to be exported, which while improving the current accounts and offering some long-term advantages has the short-term effect of narrowing the room for maneuver in consumer supply.

Naturally, it can be claimed that despite the infinitesimal increase in supply the consumer-market situation has improved tangibly. The stores look differently than just a year ago, and rationing is limited to but a few articles, some of which, e.g. sugar, are rationed for virtually non-economic reasons.

But the public perception of the state of the economy is influenced not only by the disproportion between the general economic improvement and its consumer-market reflection. There are several areas with potential for conflict, the most important of which seems to be the rate of inflation.

After last year's price shock, the public expected--and the government hoped and promised--that this year's inflation will be tangibly curbed. These expectations failed to materialize and--let it be stated without mincing words--could not materialize with the adopted social policy priorities.

Common knowledge clashes here with the realities of fight against crisis. To put it brutally, the world's economic history knows of no example of quick combatting of the crisis coupled with a simultaneous huge "welfare burden upon the economy" and maximum concern for the requirements of the poor section of society. If a crisis is to be overcome rapidly, the actual remedy is different: reduction of social benefits to the minimum, pauperization, greater social stratification, and firm enforcement of economic rules in the field of work and employment.

For both theoretical and practical reasons, we cannot adopt this strategy. Still worse, as shown by the experience of the past 2 years concerning both the "pure" anti-crisis policy and the introduction of mechanisms of reform, it is extremely difficult to introduce even the most obvious elements of an efficient strategy. One example is the labor market where--despite the logic of the crisis and the logic of fight against crisis--there is still a strong demand for employees rather than for work.

In a situation where efficient remedies are seemingly unfeasible, we are doomed to measures which are feasible but much less efficient in the short run. This is true of both the anti-crisis policy and the launching of economic reform.

There is one more aspect of the conflict, influencing the public consciousness. As shown by economic analyses, this year has seen a positive and much needed change in the overall monetary/consumer-market situation. The dearth of goods has been replaced with the dearth of money.

Theoretically, this is a major element of an efficient anti-crisis policy, in line with the reasoning that the demand for money provides the most efficient mechanism stimulating the citizens' productive activeness. I am an advocate of this way of thinking and I often expressed this view in public, calling for anti-crisis programs at the level of individuals and families. But in practice, this philosophy still does not stand the test. The dearth of money becomes a fact of life, but the reaction is focused on drive for higher wages rather than higher output. Evidence can be found in the already mentioned labor market, where people are sticking to jobs, even those poorly paid, rather than turning to the much needed, better paid but more demanding ones.

Another example is provided by inconsistent approach to unconventional forms of economic activeness, such as the Hungarian-style employee partnerships working on the parent enterprise's machinery in work-free time on their own account. There has been much talk about such partnerships for a long time, they are inscribed into the anti-inflationary program, but no such team has actually been established.

This is connected with an important and highly delicate issue bordering on both public consciousness and government policy. It can be rightly claimed that the underdevelopment of production-oriented attitudes among citizens is the product of a more or less distant past, of the perception of goals and capabilities of socialist state, and the understanding of economic realities, but it is equally true that this dominance of attitudes oriented on pay increase rather than efficiency is to a large extent influenced by the instability and inconsistency of economic policy.

Here, we turn back to the question of whether, and if so to what extent, we could make greater progress in overcoming the crisis and improving the state of the economy--and this is a key question also for the next year.

If one accepts the position that the most important goal--from the viewpoint of public approval for the government's economic policy--is to increase production and supply of consumer goods and that this is the only way to alleviate inflation-induced conflicts, than an authentic and full support for all forms of so-oriented economic activities becomes a matter of necessity--even if these activities stand in conflict with public consciousness. This is true of, e.g., the foreign-owned ("Polonian") firms, private trades, joint-stock companies, the above mentioned employee partnerships, etc.

No doubt, the effects of these unconventional forms of economic activity could be much greater if the economic, and especially fiscal, policy towards such businesses were consistent and unambiguous. This can hardly be said of this year's policy--also in respect to the traditional socialized sector of the economy which could more efficiently switch into the verbally-supported consumer production if granted unequivocal preferential treatment in the field of tax and motivation systems.

Two conditions should be met if the new forms of economic activity are to receive authentic support. First, despite the oft-repeated slogan: "There will be no retreat from economic reform," the suggestions about temporary nature of many of its provisions are still very strong. For example, the current situation is often compared to the Soviet Union's NEP [new economic policy] period of the 1920s. In my opinion, a clear-cut, unequivocal statement should be made to the effect that our economic reform and our economic system are anything but a fleeting, transitional NEP, and they introduce new, durable arrangements into the economic system of socialism. Not all of these arrangements will be kept indefinitely--but, if so, only in case no one is ready to respond to incentives or, more generally, to the chance for productive activeness.

Secondly, a line should be drawn between pathological phenomena (which emerge all the time, and especially in a period of transition) and everything that is healthy, correct, and acceptable. I am sick and tired of being fed with stories about millionaires and their fortunes--all of them suspected and condemned because of their very existence. This is only a symbol. What is at stake is not the home-grown millionaires but almost each instance of people rising in financial status above the average. Some of these instances are no doubt the effects of pathology--profiteering, theft, etc. These, and only these, cases should be investigated and punished. But the problem is not so obvious when it comes to "squeezing" into unregulated areas; and all the high and very high incomes received in proportion to economic performance should remain above suspicion.

If the excessive incomes are not socially accepted, then the only solution to the problem should be economic in nature. For example, the several hundred private growers of fruit and vegetables around Warsaw may indeed receive exorbitant incomes, but this is because there are just several hundred of them rather than a dozen thousands, which would constitute a normal economic pattern leading to a normal social structure. The incomes would be lower and they would cease annoying people. The same is true of the Polonian companies.

I write about all this because--while accepting the general emphasis in the next year's plan on the production and supply of consumer goods and exports--I am of the opinion that not all opportunities in this field were tapped last year and that there is insufficient stress on practical implementation of this priority in the draft Central Annual Plan for 1984.

Additionally, this will make it harder to solve the next year's most difficult problem to be reflected in the relationship between the state of the economy and the public consciousness, namely the problem of prices and inflation. There is every indication that the inflationary spiral in 1984 will take a higher pitch, above the acceptable limit of a single-digit inflation.

There is no doubt that the public is highly sensitive to all signals on prices and inflation. In recent months, when price problems were growing--both objective (inflationary gap between the supply of goods and increase in the supply of money, and the renewed broadening of the gap between production costs and prices) and subjective--major blunders were made, primarily in the sphere of public communication. I have in mind here the various kinds of enigmatic statements and announcements concerning the question: what next with prices?

For the past 2 years, or since the preparation for last year's price shock, I have been hoping that we will have a normal socio-economic situation, as reflected in correct preparation of the public for inevitable changes in prices. In other words, the enigmatic signals and hints should be replaced with plain speaking on what has to be done and to what extent. Otherwise there will be troubles and difficulties in other domains.

CSO: 2600/316

TRADE UNION CHAIRMAN DISCUSSES ECONOMIC PROBLEMS

AU170939 Warsaw TRYBUNA LUDU in Polish 12-13 Nov 83 pp 1, 2

[Excerpts] PAP--As we have already reported, on 10 November a session of the Council of Ministers' Committee for Trade Union Affairs was held with the participation of the chairmen of the 40 nationwide trade union organizations that have already been registered or are preparing to be registered.

The first most representational meeting of government representatives with the trade union movement that is now being revived, was dedicated to the issues that are currently the most important to working people and the whole of society, as well as to the trade unions, the defenders of the interests of the work forces. The importance and the social range, as well as the complexity of the problems undertaken at this meeting were the reasons why the discussion went on until late that evening.

One of the subjects that clearly cropped up in the discussion, but by no means dominated it, was that of wage claims, and this was normal in any trade union movement, especially in one that operates in such a difficult socioeconomic and is only just building up its influence among working people. Demands were also made on behalf of the needs of not only their own workers' communities, but also for those groups of people who are feeling the effects of the crisis, inflation and the division of incomes most keenly, and they are the old age and invalidity pensioners, families on low incomes, and workers living on fixed wages that fail to increase at the same rate as earnings do in production.

The growth in the incomes of old age and invalidity pensioners should be the same as the increase in production wages. Otherwise, there will be an old-new wallet again (as published), said Rajmund Moric, chairman of the Mining Trade Union Federation and of the mining and shaft building enterprise. We must maintain the standard of our coal extraction but demand, nevertheless, that the amount of work to be done on free Saturdays should be gradually decreased until 1986. We should change our coal extraction timetable from Saturdays to other days.

The subject of the unfortunate reintroduction of butter rationing was returned to several times during the discussion. It was said that, if you [the government] knew of the need to reintroduce rationing in October then you should have let the people know before this in some way, whereas official reports led us to

believe that the situation was good and that there would be no return to rationing after it was withdrawn.

The decision to reintroduce rationing was very harmful to the unions, Aleksander Jedrzejak, chairman of the trade union federation for light industry workers, said to the government representatives. You are to blame for failing to take into consideration the mentality of the Polish people.

The discussion was not of course, limited, to prices, wages and the cost of living. Economic problems were also the subject of a heated discussion, as was the need for a definite struggle against the waste of industrial raw materials and agricultural produce, working time and the efforts of the workers.

Polish bakeries are now working at their highest possible turnover, so that there is no time for renovating or modernizing them, said Romuald Sochnacki, chairman of the founding committee of the Spolem workers' Food Cooperative Trade Union Federation. Scientists and scientific institutes should work out a technological way of keeping bread and pastry fresher longer. This would prevent waste, as one cannot talk about a bad harvest in a crisis, because in a crisis, nothing this produced should be wasted.

Meanwhile, there is an obvious shortage of economic virtues in the Polish economy and in its society's mentality. It will be difficult to pull ourselves out of this sorry plight until we learn to save and be economical. Elsewhere in the world, regenerated materials are used for processing, while in Poland there is a shortage of warehouses for waste paper and scrap metal storage, and so on. An example of this waste and unpardonable extravagance is the sale of fuels. No one today knows, for example, how much gasoline is sold on the side.

Here, by the way, are several bitter words about our propaganda, which was criticized by many speakers at the meeting. Our propaganda is functioning in a bad and defensive way because it limits itself to issuing replies to hostile radio stations. How can one call the man on the television screen a gentleman if he tells us with a smile that there is cheese in the stores when everyone knows that there is none. All that such reports do is bring us harm. The picture that television and radio present of trade unions is also incorrect. After the first serious shock, programs are now being presented not about unions, but for trade unionists.

Henryk Fliszer, chairman of the forestry and timber industry trade union federation, spoke of the inadmissible waste of agricultural produce and the bad procurement organization, while Stefan Wojtaszyk, chairman of the Chemical Industry Trade Union Federation, spoke of the possibility of reducing certain costs by eliminating intermediary bodies.

A. Jedrzejak proposed, on behalf of his federation, that the plants which produce trash should pay 100 percent of the value of their production into the state treasury and pay in addition for the raw materials they have wasted. By striking at their pockets, he said, we will make them see sense. The trade union movement, as defender of the standard of living of the working people, should have an insight into the way the prices plants apply are calculated.

There was also no lack of criticism of the way the economic reform, as well as the management system, is being implemented. Leszek Brojanowski, chairman of the Printing Industry's Trade Union Federation, said that the social effects of the economic reform had not been anticipated. One can also sense a lack of consistency, fretting, a lack of breathing space and of prospects in this area. Not everything can, after all, be blamed on the sanctions imposed on us by the United States.

The meeting also provided the occasion to exchange experiences in trade union activities and the building up of the position of plant and nationwide organizations.

The difficulties in cooperating with the economic administration on various levels were also discussed. A large part of this administration, must first, in the view of the trade unionists, learn to regard its relations with the trade unions in a partner-like way. After the lifting of martial law, it was said, it was exceptionally difficult for the administration to get used to the new conditions under which it was necessary to share its power at the plants. Many plant directors cannot change their mentality since they continue to feel as if they were still the king of the castle in the plant. Drastic examples of this were also given. Tadeusz Cieslak, chairman of the communal and regional Farm Workers' Trade Union Federation, recalled, for instance, a director who does not acknowledge the existence of trade unions, and even goes so far as to throw trade unionists out of his office along with the social labor inspector.

Jerzy Kozlowski, chairman of the founding committee of the Fruit and Vegetable Industry's Workers Trade Union Federation, said that everyone is talking about the triangle that is composed of the management, workers' self-management bodies, and the trade unions. If the powers of the workers' self-management bodies and the trade unions are not strictly demarcated, then conflicts will increase. Even now there are signs that directors are appointing social commissions, saying that the trade unions do not supposedly represent the entire work force. However, in the opinion of Stefan Bartkiewicz, chairman of the founding committee of the Electrification and Technical Agricultural Workers' Trade Union Federation, the cooperation between the unions, the workers' self-management bodies, and the management is ideal in many enterprises. The reason behind the antagonisms [antagonizmy] that sometimes arise is often due to excessive ambitiousness, and so, there must be an overriding concern for the common good.

A matter of great importance is the partner-like treatment of the trade unions by the authorities. However, this partnership must stem from the influence of the unions and this is, above all, the result of the union activities that bring effects and are greeted with the respect of society, it was stressed during the discussion.

Deputy Premier Mieczysław F. Rakowski took the floor toward the end of the meeting. The discussion, he said, was particularly productive, interesting, and full of valuable proposals and suggestions. A considerable majority of the speeches were characterized by concern for the affairs of the country, while realism and responsibility were paramount in them. The discussion also showed how many problems there still are that we must solve together or in-

dividually. Overcoming our difficulties and the development of socialist democracy depend, above all, on the activeness of society. We are only at the beginning of the road because social processes, especially ones that have been planned on a widescale, will not implement themselves automatically, but must be carried out by people who do, after all, have various faults. The enormous pressure that the active part of the public has been exerting to make the consultation system part of our lives is understandable. It is beyond doubt that we must improve the consultation system, and quickly at that, to make it a permanent part of the concept of governing and co-governing.

CSO: 2600/300

DEVELOPMENT OF TRADE, COOPERATION WITH INDIA, IRAN REVIEWED

Trade, Cooperation with India

Warsaw RYNKI ZAGRANICZNE in Polish No 123, 13 Oct 83 p 3

[Article by Michal Byczkowski: "A Prerequisite for Beginning the Race for Cooperation"]

[Text] Polish-Indian cooperation began in 1949. India, which had won its independence only 2 years before, was plagued by internal ethnic conflicts and economic problems. It sought an alternative to the colonial order of economic relations with the outside world.

The socialist countries, including Poland, have become such a national alternative. These countries offered not only far-reaching assistance in the development of the basic areas of the Indian economy, which was still suffering from the results of centuries of backwardness, but also guaranteed that bilateral relations would develop on the basis of complete sovereignty. This was very important for a country which had experienced years of colonial rule. As a result of the 30 years of cooperative development which had begun under conditions difficult for both sides, the socialist countries reached an 11 percent share of India's total imports and almost 23 percent of its total exports by the beginning of the 1980's.

Growing Problems

India today is a country which occupies a place among the world's foremost industrial powers; it has been spectacularly successful in technology, in developing its own nuclear energy and in placing its own telecommunications satellites into orbit. The country's economic development, however, has not been free of the problems typical for developing countries. In India's case, these problems have been intensified because of the continental size of the country and its inherent demographic explosion.

The rate of economic growth, as measured by increases in the Gross National Product (GNP), has worried Indian planners because it has been declining from decade to decade. While the GNP grew by almost 45 percent in the 1950's, as measured in steady prices, its growth was only 41 percent in the 1960's, and

down to 39 percent in the 1970's. According to carefully checked and verified planning statistics, estimates for the 1980's envision an average yearly growth of no more than 3.5 percent, i.e., between 34 and 41 percent for the entire decade.

In light of this, a substantial improvement in living conditions is viewed as being too optimistic. The lack of any perceptible results in holding down population growth, about 25 percent for the decade based on an annual growth rate of 2.2 percent over 20 years, indicates that only a 1.2 percent increase in the GNP for each inhabitant has taken place during this time. If current trends persist, annual GNP growth will not exceed 1.2 percent for the rest of the 1980's.

Balance of Payments Barriers

One of the key reasons for India's slow economic development is its long history of unfavorable trade and payments balances. In the 1982-83 period, India's trade deficit was about 50 billion rupees (\$1 = 10 rupees); this was hardly less than the deficits of the preceding two years. These deficits were partly offset by non-trade payments: between 1980 and 1982, record transfers of capital and money from Indians living abroad were noted; tourism also brought in increasingly more money. However, the payments balance was dependent on the amount of foreign aid received. Owing to the then very favorable low interest rates and arrangements for foreign loan payments, repayment was not a heavy burden for the economy and amounted to only 11-13 percent of the country's export worth at the beginning of the 1980's. Seventy-five percent of the loans negotiated by the end of 1982 were government loans with interest rates of between 0.5 and 0.6 percent over a 40-year period for repayment; 12 percent of all funds acquired as foreign aid were either grants or later remitted. Currently, the sources for suitable loans are becoming exhausted. New borrowers, like the People's Republic of China, have appeared and are competing with India for the funds available. On the other hand, however, the Indian economy's need for foreign aid is not diminished. In this situation, the country faces the need to utilize more extensively the funds which are available from the IMF of commercial lenders, but which also have less favorable conditions.

It is envisioned that unless the goals of increasing exports while decreasing imports, especially raw resources which are now particularly expensive, are realized, the loan payments already outstanding will so bear down on the country's economic health that it will not be until 1985-86 that the country will see any more real growth. This is such a real threat that even large increases in non-trade revenue will not be of any assistance. India does not intend, at least verbally, to renounce any of its economic sovereignty to the degree necessary for any additional influx of capital.

Disproportionate Development

Besides the already mentioned slowdown in long-term growth rates, the increasing intersector and interregional disproportions in development are becoming a special concern. For years, the development of the infrastructure's basic sectors--energy, the acquisition of energy resources and transportation--has not

kept up with the rapidly growing requirements of the remaining areas of the economy. Since 1950, the installation of new energy plants has deviated from the central plan on the average of 30 percent annually; the degree of energy provision for agriculture and the communal economy has not exceeded 85-90 percent even during the best periods.

Problems in the development of individual Indian states are pronounced. In the 1950-61 period, the GNP for every inhabitant of the poorest state, Bihar, was 1.9 times less than for an inhabitant of the richest state, Maharashtra. Twenty years later, in the 1980-81 timeframe, Punjab, which now is the most wealthy state, realized a GNP 3.2 times larger than Bihar, which remains the poorest state.

To complete the picture, it would be necessary to draw up a list of those problems piling up before the economic administration concerning agriculture, its climatic disturbances and its constant struggle against the shortages of machines, fertilizer, means to protect seeds and, generally speaking, against the entire agrarian situation. It would also be necessary to keep the problems of industry in mind; industry's foremost sector does not exhibit the desired administration and efficiency, while the private sector, despite its several advanced industrial-commercial groups, is too weak and fragmented to find the means to research aggressive marketing methods which would permit effective competition on the international market.

Any further enumeration of the problems being faced would distort the total picture of today's Indian economy. This holds true for agriculture, which, despite its difficulties and the effects of the so-called green revolution, is quite near to guaranteeing the country self-sufficiency in food production. Industry, although still too bureaucratized in relation to policies of foreign cooperation, is sensible and coordinated; it has concluded 7,200 agreements with the leading foreign enterprises. Among the most successful of the agreements are those dealing with electronics, machines and chemicals; by creating a new situation in which quality is stressed, the prerequisites for the development of competitive export products have been met.

Polish Specialties

In the almost 35 years of cooperation with India, Poland has become known as an appreciated deliverer of machines and appliances, as well as industrial products and other production commodities. Currently, sites 6 and 7 of the "Polish" energy project are being built in India. These sites will provide industrial electrical power for Bokaro and Durgapur, where metallurgical combines are being built. Polish participation helped build or modernized the well-known hard coal mines in the Jharia Basin, as well as its coal processing plants. Polish mining specialists are supervising the digging of mine shafts and the planning of the management of new mining regions; they are also vigilant in preventing the occurrence of mining accidents.

Fifteen Polish ships sail under the Indian flag. At the same time, every 10th vessel of the Indian fleet is equipped with an engine produced by the H. Cegielski Mills of Poznan. More than 50 grain mills, spread throughout India

and having an aggregate productivity of 1 million tons of flour annually, are equipped either completely or to a great extent with Polish appliances. Besides deliveries of equipment and appliances, raw materials and semi-finished products for industry play a significant role in Polish exports. In the last 21 years, Poland has provided India overall with 3 million tons of sulphur, several hundred thousand tons of urea and other chemical resources, and several thousand tons of steel products, rails, etc.

Currently, contracts are being implemented for the delivery of Polish coke and cement. These are only the most important items which show the extent of Polish exports to India, a country which is now our fourth largest trading partner in the Third World.

Prospects

The significance of the goods imported from India for Polish consumption is most clearly demonstrated by two figures: almost 20,000 tons of tea, i.e., almost two-thirds of Poland's total tea imports, and 250,000 tons of fodder components annually are imported from India. However, India has more to offer than just its traditional goods. More and more, we are seeing products from the electronics, machine, chemical, consumer and other branches of the manufacturing industry.

In order more extensively to take advantage of India's offers, it is necessary for our exports to India to grow. The clearing system of bilateral accounts, accepted by both parties as a useful tool for stimulating trade development, is guided by its own hard rules, the key one of which is the need to balance our trade practices over fixed periods. At the same time, in recent years the balance has become unfavorable for Poland, thus restricting our chances to make important purchases in India.

Poland is aiming at increasing economic relations with India in important fields like energy, coal mining and engine building, while simultaneously undertaking steps to further diversify exports from here. It seems, however, that the conditions for renovating our forms of cooperation have arrived. The greatest hopes need to be tied to the development of industrial cooperation. The real advantages of this form of trade were proven by the examples of such trade conducted in the 1960's when we jointly built engines. We estimate that before our Indian partner masters the production process, our exports of tractor parts and subassemblies will reach the equivalent of 30,000 complete units.

The conclusion of such a large contract for the delivery of finished tractors would have been unusually difficult in the light of India's policies for economic cooperation abroad. These policies aim at making India self-sufficient in key production fields; it prefers to import technology and then quickly "Indianize" the production of finished devices at the port of entry, even if the process itself were to cause considerable delay in satisfying requirements.

Our Indian partners are especially interested in a form of technology transfer which begins with a license to produce the product in India and then results

in the Indian acquisition of that technology. They are not wrong in believing that, owing to investment capital, the interest of the foreign partner in the rapid application of technology and production development is increasing.

The results of the activities of Polish enterprises on the Indian market in the 1980's and further will depend on how well we succeed in becoming involved in the race for cooperation with this country. Up until now, we have not really participated. Every contract concluded through competition closes forever the door for the sale of even the best finished products to outsiders. Every contract for cooperation concluded by a Polish enterprise indicates an opportunity to conduct stable export activities for many years.

Trade, Cooperation with Iran

Warsaw RYNKI ZAGRANICZNE in Polish No 120, 6 Oct 83 p 2

[Article by Andrzej Maskalan: "Iran--A Serious and Promising Partner"]

[Text] The Ninth International Trade Fair took place in Teheran from 10 through 21 September 1983. After not having attended last year's fair, Poland participated this year with a large exposition covering 600 square meters. International fairs have been taking place in Teheran for many years. There was, however, no fair in Teheran in 1981 owing to Iran's turbulent internal and external situation, but in 1982 the fair was again organized and 22 countries participated in it.

This year's fair has brought together exhibitions from 31 countries, including 18 European and 9 Asian. The exhibitions included agricultural sections. The expositions of various sizes represented almost all industrial countries. The participation by nine socialist countries merits particular comment; these were six of the seven CEMA countries--the USSR did not attend--Cuba, the People's Republic of China and Yugoslavia. The German Democratic Republic had the largest exposition. On the other hand, of those Western countries attending, only the expositions of West Germany and Italy deserve recognition because of their size and variety.

Trade, Despite the Problems

The significant increase in the number of foreign exhibitors demonstrates the growing interest of traders in the Iranian market. Despite the ongoing 3-year war and the complicated domestic situation, the Iranian economy has been able to retain much of its resilience and capability to develop further. The basis for all this is, of course, Iran's oil. The almost 7.2 million barrels of oil produced daily bring in yearly revenues of many billions of dollars. Even when one considers the burden placed on the national economy by the war, Iran's authorities have considerable reserves of hard currencies at their disposal. These funds permit the import of supplies and investments and the continuation of several investment projects begun in previous years.

Besides Iran's well-known situation, the far-reaching structural and institutional changes are exerting a great influence on the country's forms of foreign trade. In recent years, the role of the state in Iran's economy has increased considerably. Contributing to this is the nationalization of many operations belonging to Western capital, although we cannot forget that the utilization potential of many of these operations was not being fully utilized because of the sanctions imposed by several Western countries. In the face of the lack of resources and foreign cooperation, many investments, both in the production sphere as well as in the infrastructure as it is understood, have been frozen at various levels of implementation. The Iranian authorities' goal of expanding the state's influence in the economy is increasing both the state's and central administration's role in that economy. This is becoming ever more clear in the sphere of foreign trade, where the state's authorities exercise complete and direct control over all sales concluded by every sector of the national economy. In making decisions on imports, a large role is played by the 12 enterprises performing duties which affect the whole country in technological and material provision. These enterprises are subordinated to the trade ministry, which also controls foreign trade.

The Competitors Assembly

The exhibitions of the majority of countries at this year's International Fair at Teheran dealt purely with trading issues. Elements of general propaganda played a small role, but only in those displays dedicated specifically to this purpose. The makeup of practically all the countries' displays was dedicated to the actual and real needs of Iran; the displays showed a readiness to meet those needs. Almost all leading producers presented a extensive array of construction equipment for various uses. There were several well-done exhibits which dealt with electrical energy, and not only in its production, but also with its transfer. Production tools for many branches of industry were presented, including the metal, light, chemical, printing and consumer, machine and agricultural industries, as well as communications and data-processing equipment. Considering the tendencies of the Iranian market, there were many displays dealing with food and the food supply.

In assessing the approach used by the foreign exhibitors, it needs to be stated that an international race for this market is ongoing and intensifying. The current import opportunities in Iran are causing many of her trading partners to set up permanent representations in that market. No one is deterred by the considerable difficulties and burdens connected to Iranian trade. Among these difficulties, one needs to keep in mind the restrictions on the free activity of private firms; these firms, outside of the drilling and processing of petroleum, make up the basis of the Iranian economy. There is also the capriciousness of the state administration, the bureaucracy of which has been changed to a great extent, especially with regard to its leadership. One also needs to keep in mind the changing priorities which influence the granting of import licenses by Iranian enterprises and the considerable peevishness of Iranian officials because of national and religious considerations. One cannot overlook at all the need for foreigners living in Iran to adapt to the local customs, which are based on a vigorous observance of Islamic laws and which differ significantly from European culture and customs.

If the above-mentioned obstacles and difficulties do not discourage leading producers from trying to find a place on the list of suppliers to Iran, then it is well worth the effort. Even the firms of countries which currently have poor political relations with Iran are making great efforts to maintain their positions in Iran, most often through various intermediaries.

Differing markedly from the foreign displays and occupying many pavilions and open-air exhibits was the Iranian exposition itself; it had a decisively impressive and propagandistic flavor. In addition to finished products produced on assembly-lines in series, there were many prototypes and single-item productions on display. Separate displays represented individual regions, newly organized communities, cooperatives, etc.

Here it must be distinctly said that the Iranian authorities attached not only great economic, but also great political and social significance to the fair. Under conditions of tight security, the fair was visited by crowds representing all elements of Iranian society. In the fair's 12 days, more than 1.5 million people visited the fair grounds.

The Polish Exposition

Poland's trade with Iran in the 1970's consisted of the import of only oil in varying amounts and exports of construction projects for the agricultural processing industry (sugar, refrigeration), as well as for efficient energy use. In recent years, there has been a gradual equalization of sales: a certain reduction in Polish imports with an increase in exports. This year, trade between the two countries will amount to 90 million dollars, equally advantageous. Polish exports currently include machine tools, copper wire and cable, iron and chemical products and construction services. Iran still exports chiefly oil to Poland.

In comparing Poland to the other states of CEMA, it has to be said that Poland is close to the bottom of the list as far as exports to Iran go. Several times greater are the exports from the GDR, Bulgaria, and even Czechoslovakia. All of these have recorded this considerable growth in their exports in recent years because of the break in relations between the United States and several other Western countries and Iran. During this time, Poland was struggling with her own internal problems and could not take much advantage of the resulting opportunities. To catch up would be difficult.

In the Polish undertaking, organized by the Polish Chamber of Foreign Trade, eight firms of the central foreign trade organization took part: Metal-Export, Elektrim, Metal-Export-Via, Pezetel, Pol-Mot, Budimex, Powerservice and Polimex-Cekop. Not participating with their own displays, the following foreign trade enterprises did utilize the opportunity of the fair to intensify their own activities: Unifa, Varimex, Labimex, Koper and Navimor. The Polish exposition covered an area of 400 square meters indoors and 200 square meters outdoors. In the open-air area the Pol-Mot enterprise presented landrovers and service and diagnostic appliances. Metal-Export was in the forefront of the exposition with many machine tools, gusher valves and auxiliary appliances. Metal-Export-Via, complementing this assortment, offered an extensive assortment of hand

and power tools. Elektrim offered its Iranian customers insulators, copper wire and cable, lighting equipment and telephones. Pezetael presented compression-ignition engines, while Polservice, Budimex and Polimex-Cekop offered construction, building and technical specialization, which it has acquired through experience in Iran and other countries of the region.

In assessing the makeup of the Polish exposition at this year's fair in Teheran, we have to emphasize the total trade nature of the exhibits. In the face of Iran's requirements for technology applicable to the low level of experience of the country's technical cadres, i.e., technology simple to operate, service, and repair, the Polish exposition was especially well-suited. The next planned cooperation between Polish and Iranian enterprises will amount to several million dollars. However, the implementation of such projects is dependent on the issue of import licenses by the Iranian authorities. Although there are several Polish firms which deliver constantly to Iran, like Metal-Export and Elektrim, and know how to conduct business in Iran, there are other firms which still have to put in the time and effort to overcome the many difficulties facing them before they can trade with Iranian firms. Pol-Mot is the best example of how to do it. Before the great interest in landrovers results in eventual sales, there is a need to conduct the requisite testing of the vehicles in Iran itself; competent Iranian authorities will have to participate, although there is still a shortage of such people because of the novelty of the product to Iran. Other firms undertaking such ancillary ventures in Iran will also have to face similar difficulties. Ultimately, by not participating in last year's fair, the Polish position at the fair this year was somewhat less than favorable, at least as far as the location designated for the Polish displays was concerned.

What About Tomorrow?

In assessing the future prospects of the development of Polish-Iranian trade relations in the light of the Ninth International Trade Fair in Teheran, we have to say that there are considerable possibilities to expand sales. Poland is able to deliver many products of middle-level technology which Iran currently wants. At the same time, Iran can expand its exports beyond oil and its by-products. Certain aspects of Iran's exports outside of oil are not simple, however; it seems that there are some real chances for expansion in the mechanization industry. Finally, because of the current energy situation in the world, the opportunity for Poland to acquire oil in exchange for finished industrial products is very attractive.

In considering the above-stated ideas and with a stabilized situation emerging inside Iran, it is safe to imagine that Poland's participation in future Iranian fairs will be significantly more extensive than this year's participation. On the basis of upcoming coordination efforts, it is known that more than 70 Polish firms, authorized to conduct foreign trade, are interested in these future fairs. These fairs are the perfect opportunity to permit a considerable increase in the size of our displays and to intensify our assistance efforts. An indispensable prerequisite in realizing this goal is the organization of efforts which correspond to the dates set by the fairs' organizers and the preparations of the trade exhibits which serve Polish and Iranian trade interests and needs. We have to remember that the international race for Iranian oil is on. With the right efforts and foresight, we can be in the lead.

DAILY RAISES QUESTIONS ABOUT CIVIL AVIATION

Warsaw SZTANDAR MŁODYCH in Polish No 206, 18 Oct 83 p 3

[Article by Jacek Swidziński: "Questions About Civil Aviation"]

[Text] LOT Polish Airlines is going through a difficult period. The days when the company regularly received new transatlantic aircraft and its planes flew to New York and Bangkok seem to belong to the distant past. The world crisis in aviation caused by the astronomical rise in fuel prices, the U.S.A.'s brutal suspension of the Polish-American agreement on civil aviation, plus the smuggling scandal that recently rocked the airline--all these factors have contributed to the fact that LOT has lost much of its former splendor.

One can hardly blame LOT for the increased price of aviation fuel (which has gone up 800 percent since the late 70's), nor can it be held responsible for the U.S. withdrawal of landing rights. But aside from these objective difficulties there are many other factors which negatively affect the airline, and it is often difficult to determine who is responsible for them. Are these negative phenomena unavoidable?

Airlines can be divided into two categories. One includes all those in the socialist countries, together with some others such as Air France, which are public utility enterprises financed by the state and whose existence is, therefore, not imperilled if they run into loss. The second category is made up of those airlines which treat and transport of passengers as a normal business. There is one odd man out in all this--LOT, whose precise status is still unclear. The general principles of the economic reform envisage the possibility of giving public utilities preferential treatment, but until the Sejm adopts legislation on LOT, the airline will remain suspended in a legal vacuum.

LOT's hazy legal status is reflected in the fact that it makes a substantial profit, most of which is siphoned off by the state in the form of taxes. This would seem to imply that LOT is treated like any other autonomous, self-financing enterprise...

But this question can also be viewed from a different angle. LOT sells tickets on behalf of foreign airlines, accepting payment in zloty. The main customers here are Poles travelling abroad on official business. Thus,

the airline has a zloty income and hard currency expenditure, which is hardly a profitable way of doing business. The same situation occurs with charter flights of Polish deep sea fishermen traveling to Peru, or Polish construction specialists flying to Libya. LOT is paid for these charters in zloty but has to pay various charges, etc., in hard currency. So in these cases LOT is treated as a public utility.

There is a growing body of opinion within the airline that Polish citizens should pay part of their fares in hard currency. This would particularly apply to business travel. Polish enterprises with substantial hard currency accounts make considerable savings at LOT's expense. Is this in keeping with the principle of self-financing?

So LOT seems to be a bit of a "whipping boy"--an "autonomous" enterprise when taxes have to be paid and a "public utility" when others are trying to economize.

An excellent example of this state of affairs is the case of LOT's new air terminal in the center of Warsaw. When the British firm Cementation backed out of the project, the building site stood abandoned for a long time, with no one sure what should be done in the new circumstances. The government finally decided that construction work was to be carried on until at least the shell of the building was erected.

(It should be noted here that the air terminal is apparently "Europe's biggest investment in terms of total office space.")

It is estimated that the cost of finishing the air terminal runs into billions of zloty, while LOT, after paying its taxes, is only capable of investing several dozen million at most. Yet LOT has been ordered to take over the duties of general investor. In addition, it seems that the building will now have to be finished completely; all talk of erecting a "shell" has died down.

It would take years for LOT to complete the air terminal on its own. But so far it has not managed to find any foreign investor willing to participate in the project. So the airline faces the prospect of enormous hard currency outlays.

One way out would be to set up a joint-stock company along with other Polish enterprises possessing export revenue allowances in hard currency. Of course, these enterprises would have to be offered some material incentive for involving themselves in the project. Another idea worth considering is that of a joint venture with foreign capital. But then who is going to enter into partnership with an enterprise whose status is unclear?

Unfortunately, the air terminal is not LOT's only worry. Another serious problem, one that has to be solved urgently, is the question of new equipment.

The Soviet Union has been Poland's main supplier of aircraft for years; in fact, it has recently become Poland's sole supplier of aircraft. This cooperation has brought many benefits which are widely known. However, one has to be aware of the fact that the Soviet Union's main customer is its own airline, Aeroflot.

LOT's requirements are very different from those of its Soviet counterpart. The huge disproportion between the two airlines means that it is hard to imagine the Soviet aerospace industry starting to build aircraft to LOT's particular specifications.

This leaves just two eventualities--either LOT has to adapt its operations to the planes it already has access to, or it has to explore unconventional ways of obtaining new aircraft. The first option will always be connected with the risk of running operations at a loss.

A good example of the problems involved here is the Soviet wide-bodied, medium-haul Ilyushin-86, which LOT can only fill to capacity at the height of the tourist season, flying passengers to the Black Sea resorts of Varna and Burgas. At present, the Soviet Union does not manufacture the wide-bodied, long-haul machine that LOT is dreaming about.

Some specialists point out that the airline could buy or lease secondhand Western aircraft. However, opponents of this idea stress the political implications of aircraft purchases and point to the possibility of being cut off from spare parts by sanctions similar to those imposed by President Reagan.

One solution to LOT's problems would be to purchase the British BAC One-Eleven airliner now being produced in Romania under license as the ROMBAC 1-11. This is a short-to-medium range aircraft capable of carrying 100 passengers, which has the important advantage of being low on fuel consumption. But these planes are relatively expensive--the Romanians are demanding somewhere between 10 and 20 million dollars for each machine. There might just be a possibility of getting some planes by trading Polish coal... In any case, the whole matter is still in the realm of theory, particularly since the Romanians have only produced a few aircraft so far.

It is also about time LOT began preparations for reopening its trans-atlantic routes, although experts believe that this is unlikely to happen before 1985. The airline is planning to resume flights to Bangkok in the near future--wide-bodied aircraft would be very handy in that route.

Another problem that LOT has to solve somehow is aircraft for domestic flights. The Antonov-24's that have been the mainstay of these routes don't have much flying time left ahead of them, and LOT has to find replacements. So far there are none.

STATE OF AUTOMOTIVE INDUSTRY REVIEWED

Warsaw PRZEGLAD TECHNICZNY in Polish No 40, 2 Oct 83 pp 15-16

[Excerpts] Forty billion zloty was spent on the development of car production in the 1970's, 30 billion on the development of the production of trucks, buses and vans and 7 billion on the development of the service network.

The development of the production capacity was not harmonious, especially as regards the complementarity in component production. Over the last 3 years this has resulted in deteriorating availability of spare parts, and that is so despite the 1979 decision to limit the production of complete vehicles in favor of raising the supplies of scarce components and spares.

The number of lorries currently in use totals about 650,000, including some 300,000 vans, some 250,000 trucks from 2.5 to 6 tons payload and some 110,000 trucks over 6 tons.

Vehicles imported from other socialist countries (KAMAZ, ZIL, Skoda, Tatra, Robur) account for 25 percent of the overall number of trucks. The diversity of types and variants causes a lot of maintenance problems to the users. One definite drawback is that a high proportion of commercial vehicles (98 percent of delivery vans and 58 percent of medium-payload trucks) are powered by gasoline engines.

There are over 65,000 buses in Poland, including some 9,000 small ones, 33,000 regular and 21,000 large-capacity units. In a certain measure, bus transport relies on buses imported from Hungary and Yugoslavia.

Despite the purchase of many foreign licenses, the modernity standard of the vehicles produced by the Polish industry does not match the average European level. The situation is the worst with regard to delivery vans. The FSC-Lublin truck factory and the FSD Nysa coachworks started to produce their vans in 1958. Despite several modernization programs, they do not fulfill the users' expectations. They are powered by a gas-thirsty gasoline engine, have too low payload, and the driver's cabin does not meet safety requirements.

The medium trucks (Star 28, 29 and 660), in addition to the shortcomings listed above, are characterized by low reliability and short life. They are being replaced by the Star 200 family of trucks powered by a 150 hp diesel engine with transmission built under a foreign license and improved braking, steering and electronic systems. This family also has an outdated driver's cabin, too small payload area and insufficient durability of components.

The heavy trucks of the Jelcz-300 series, despite the use of licensed and imported components do not meet the users' requirements either, whether with regard to the driver's comfort, performance (too high weight-to-payload ratio) or reliability.

There are also reservations about the durability and reliability of the buses that are being built by the Polish motor industry. In the buses produced by the Sanok Bus Factory, the rear axles borrowed from Star trucks are particularly breakdown-prone. The low reliability of the buses from the Jelcz Auto Works is caused by the low quality of the engine (the Leyland-licensed SW680 unit with 180 hp rating), the substitution of replacement materials and techniques for the required ones and the fact that the buses are often overloaded. Special-purpose vehicles enjoy a good reputation with the users.

The level of modernity of the engines powering delivery vans and trucks is low. The S-21 engine used in vans is a totally outdated petrol unit weighing 188 kilograms and rated at 70 hp. It burns 14 liters of petrol per 100 kilometers.

The transmissions in delivery vans and all-terrain passengers vehicles (modernized versions of the gearboxes of the Warszawa car) are of a low quality and are unsuitable for more powerful engines. The gearboxes of the Star 28 and 29 lorries are also of a low quality. Only the transmissions of the Jelcz-Berliet buses and Jelcz lorries are of an adequate quality standard. The standard of electric fittings for motor vehicles is medium to good. Shock absorbers produced by the Krosno factory get a high rating.

Technical problems are responsible for the fact that 20 percent of trucks and 25 percent of buses in the PKS road haulage enterprise and 30 percent of buses in municipal transport companies are out of commission at any given time.

Spare parts for the trucks and buses currently used in Poland are produced by some 300 manufacturers subordinated to six different ministries and imported from seven countries. The biggest shortages concern pistons and piston rings, cylinder liners, elements of fuel injection systems for diesel engines, springs, filters, gearbox parts, steering systems and servo mechanisms, parts for starter motors, generators and many kinds of bolts.

According to manufacturers, the shortage of over 1,500 different kinds of parts and components for trucks and buses is the result of the lack of production capacities (76 percent of the items), the shortage of domestically produced raw materials (12 percent) and the lack of hard currency to finance the import of some 150 items (11 percent).

The proportion of remanufactured parts to those that could be reconditioned is very low. According to specialists, at least 230 percent of parts could be reconditioned and the economic results of such an operation are excellent. However, it is necessary to have a properly functioning system of recovery of used parts and components. It would appear that the reform has provided sufficient economic incentives for the development of remanufacturing.

Remanufacturing also makes sense at a time when enterprises are not able to use their production capacity in full because of the shortage of materials.

In terms of the technical standard of its production facilities, the FSC-Lublin Factory lags far behind the average Polish standard. During the last 25 years as little as 0.15 percent of the value of vehicles it sold during that period was spent on modernization. It should be added that FSC-Lublin is a supplier of components for other motor industry plants. Its output virtually determines the level of overall production of cars, vans, trucks and buses as well as many farming machines.

The FSD-Nysa coachworks plant depends in a great measure on deliveries of parts from Lublin. The degree of depreciation of its fixed assets has reached 45.2 percent, which signifies frequent breakdowns and the necessity to employ many maintenance workers. The local labor market situation is so bad that FSD-Nysa employs 20 percent workers fewer than it needs. It lacks appropriate storage facilities. The modernization of its paint shop is both from the point of view of increasing production capacity and improving work safety.

The FSR-Poznan factory, which builds pick-up trucks for the rural market, is made up of nine plants. The production technology hardly resembles modern production practice. The lack of automation requires the use of labor-consuming manual techniques in the welding shop and assembly. Next to the main plant stands an almost completed mothballed project.

The facilities of the FSC-Starachowice lorry factory represent differing levels of modernity, with the metallurgical departments desperately needing fresh equipment. The difficult working conditions are not conducive to keeping a stable force of skilled workers.

At the SFA bus factory in Sanok, production capacity is determined by the shortage of space in the welding and assembly shop and in the final assembly department. Also this factory has a mothballed investment project that is not far from completion.

At the JZS factory in Jelcz only some production units have been assigned funds for modernization. The factory's main problem is to ensure the supplies of components for the PR-110 French-licensed bus. The plant still has not managed to lower sufficiently the proportion of imported components that go into these buses. Work is in progress on removing the flaws in the design of the bus and lowering the use of imported parts.

STATUS OF ORGANIZATIONS OF ASSOCIATED LABOR ARGUED

Belgrade NEDELJNE INFORMATIVNE NOVINE in Serbo-Croatian No 1708, 25 Sep 83
pp 8-11

[Article by Milan Milosevic: "The Enterprise as a (Con)federation"]

[Text] The Yugoslav enterprise is cut up too small, broken up into OOUR's [basic organizations of associated labor] that do not agree, blocked by internal conflicts, and, as in the story in which everyone is pulling the cart in his own direction, it is incapable of decisive business moves.

Many will not agree with that kind of (severe) assessment, but there are still many of those who think that our potential has been fragmented to an excessive degree and that progress cannot be made if a way is not found to bring the parts together. One sentence in the long-range stabilization program specifically recommends that the work organization must be reaffirmed as the economic entity. The Belgrade City Committee of the LC is just now preparing a meeting at which intensification of the processes of integration in Belgrade's economy is to be debated. A conference was prepared just before the weekend in which well-known economists, political scientists and business executives participated. The principal question was whether and how to reaffirm the enterprise.

One has the impression that that point has been reached, as in acupuncture, which can influence all the most important parts of the organism. The first association is that the debate would also have to touch on some aspects of the political spirit of the times, to register the influence of integrative and disintegrative, of centrifugal and centripetal, forces in the economy, but also in society.

The diagnosis appears to have been arrived at that that federal principle with its concomitant features (the veto, consensus) has become dominant even where it is not necessary, indeed even where it is harmful. The republics are being turned into federations of opstinas, and enterprises into federations of OOUR's. In some cases indeed even a confederation.

The Scientific Research Institute of the School of Economics at Belgrade University has analyzed the self-management organization of associated labor in the capital and among other things has concluded that "the work organization seems to have disappeared as a vital entity in the conduct of economic activity."

"The so-called processes of OOUR-ization at all costs have not only brought about an unnatural tethering of technoeconomic connections within the work organization as a business system, but is often causing deformations and limitations in the exercise of self-management," the study goes on to say.

What will the debate of this topic show? The problem is delicate and probably we can expect that many of the dilemmas will have to take on even an ideological overtone.

No Chance for Economics

Under the Law on Associated Labor the principal entity in our economic system is not the enterprise, the work organization, but the OOUR. Time, "however," has shown that it is indispensable for the enterprise--through which all the principles of economic policy are implemented--to become at least the key entity in the conduct of economic activity and economic policy. The horizons and potential of the OOUR, as also shown by this crisis, are too narrow. On the other hand, it is likely that there will be "defenders of the constitution" who will argue: the division is between those who favor the OOUR and those who favor the status quo.

In this issue NIN has done an exclusive by getting the opinions of a sizable number of scientists and business executives invited to the conference in the city committee on integration in Belgrade's economy. We will give quite a bit of space to these opinions so that the arguments can be presented by those who favor changes, but also those who think that this is not the point at which we should act at present.

It is indicative that several enterprise directors wrote in the first sentence that discussion on this topic is valuable, but that it is perhaps even overdue.

Jovan Mileusnic, director of "Jugohemija," says that this kind of discussion should have begun much earlier: "Experience has offered us daily and numerous occasions. We have suffered many consequences which incorporate, we should not hide it, quite a few of the causes of our present difficult economic situation. But it seems that we have been slaves to political opportunism and inertia. Thus the system of self-management organization in the economy has become an end in itself. Economic principles and economic experiences have been displaced and have been left without a chance wherever they did not fit into the OOUR-ist policy, the consensuses and the entangled and expensive systems of management and decisionmaking.

"Wise is he who takes advantage of the experience of others. Economic experience teaches us about the advantage of concentration and integration of research and scientific work, of knowledge, of development programs, of the investment dinar, but also of every other dinar, of tools and equipment, of the large production run and of specialization. We on the contrary have broken all that up, cut it into pieces, marked out boundaries and aimed at deconcentration. The interest (quite narrow) of the OOUR quite often prevails over the principles of profitability, economic efficiency and optimality."

Filip Grujic, director of the "21 Maj" SOUR [Complex Organization of Associated Labor], gives similar arguments--higher efficiency in the conduct of economic activity necessitates a higher degree of use of specialized knowledge, greater mobility of capital, and optimum division of labor: "Diminishing the size and increasing the number of business entities tends to increase unproductive hiring, while at the same time there is a drop in the quality of specialized work, it slows down the circulation of capital, it scatters the already inadequate accumulation, it favors group-ownership behavior patterns, and it detracts from motivation for productive work and so on."

Aside from a well-thought-out political effort, success in the campaign to strengthen business systems also requires, in Grujic's opinion, a certain adaptation of legal regulations and economic policy measures.

By the logic of the thing, "an inefficient business entity cannot be organized on the principles of self-management, since it is not in accord with the basic interests of the workers," Grujic says.

Dr Radmila Stojanovic, professor in the School of Economics of Belgrade University, emphasizes that integration in the economy is a necessary concomitant and precondition for any more rapid economic development: "The higher the level of development that has been attained, the higher the general technical level of all activities, the more extensive and advanced integration must be as well."

A Chain of Connected Links

She enumerates a number of constructive consequences of good integration: scientific and technical advances are applied more rapidly, all kinds of costs are reduced in various ways, especially production cost, concentration of accumulation becomes possible; integration is the best weapon against the fragmentation of available resources, which is causing the excessive indebtedness of the economy and so on. Integration also makes it possible to monitor constantly the optimum size of production plants and the optimum volume of output, which is in turn steadily increasing with scientific and technical progress--without integration one cannot obtain the critical mass of production factors or whole series of development tasks.

Radmila Stojanovic also feels that integration hastens the rise in the level of information of the self-managers to the level that makes it possible to make optimum decisions. It is not possible to achieve even approximate remuneration according to the results of work in a parcelized and disintegrated economy, since the results of work are affected by a whole number of factors which can be examined and measured only when the entire production chains are taken in view, and not just their individual links.

Radmila Stojanovic emphasizes, however, that it is very important that integration not be administrative and imposed, but economic and self-managing. In our practice, she says, we have experienced what coerced disintegration means, but also what coerced integration means. Both are harmful, though in different ways. Let us liberate the economy, then, of legislatively coerced parcelization into numerous SOUR's, but also of certain political forms of

coercion toward uneconomic integration as a way of rescuing mistakes in investment policy.

Dr Milan Vujicic, acting member of the business board of JAT (Yugoslav Airline), emphasizes that the struggle for higher revenues and income is not possible without unity between policy and the behavior of the internal components of a unified system. Disintegrative developments and partial interests which are destroying business systems are degrading the business function and reducing self-management to a mandatory consensus--they are resulting in the dominance of group interests and differences within the same work organizations which the workers cannot and do not wish to put up with any longer. All of this is tending to weaken the work organization, which does not have an integrative force and real power to act on behalf of its parts.

Dr Mihajlo Milojevic, director of the "Ivo Lola Ribar" SOUR, made a statement which was similar in principle: "In adopting the constitution and the Law on Associated Labor we threw out centralism," he says, adding in conclusion, "that much of what the world has invented should not be invented all over again."

He feels that the formation of all possible staff services within OOUR's associated to make up the work organization, that is, formation of all staff services in a work organization associated with others to form an SOUR, are no advantage at all. The large number of staff services increases the office force, formalizes self-management and very often has a negative effect on the sense of community of the work organization or SOUR. Yet work organizations which have little real sense of community and few relations based on income sharing are not effective economic entities. There is a need, he says, to achieve greater responsibility on the part of the League of Communists for the sense of community and the "true essence of association."

Our complex work organization has become entangled with an artificial pluralism of the interests of its parts, says Dr Jovan Todorovic, docent of the School of Economics, warning of the danger that our so-called OOUR-ization will result in a kind of Balkanization of associated labor instead of affirmation of entities with superior economic performance.

Balkanization of Associated Labor Instead of Affirmation

As is well known, "Balkanization" is an expression that signifies the existence of divided and irreconcilable entities at war with one another.

In the judgment of Dr Sreten Sokic, professor in the School of Political Science, the eighth decade has passed "without any very valid economic confirmation either of the predominant economic forms or of the stage of development that has been gone through." It will be necessary, he says, to free ourselves of exaggerated ideological forces and all unrealistic and in certain cases even Utopist conceptions.

He recalls Marx's precept: "If the external acquisition of independence of those who are inwardly dependent lasts beyond a certain point, then unity will be brought about by force--by means of a crisis."

Dr. Stibodan Ostojic of the Institute of Industrial Economics expressed an interesting assessment; his point of departure is the view that the concept of the decentralized enterprise "with quasi-autonomous OOUR's"--is ideologically acceptable since it makes it possible to strengthen self-management through smaller entities in the work process, and it stands in the way of central technomanagerial structures. It also makes economic sense, since it strengthens economic motivation of the workers, enhances their economic responsibility through the "devolution" of income and so on. The OOUR-ist organization does not in principle contradict optimum conduct of business on an economic basis, he emphasizes, recalling that decentralization of the large enterprise is also characteristic of Western economies today.

Creation of the work organization and of the SOUR as a "federal" organization on the principle of consensus stands in the way of management efficiency, increases the costs of coordination, dissolves the tissue of the enterprise, and often creates outright chaos. This is the greatest mistake, Ostojic says. The enterprise cannot be a federation of OOUR's after a pattern that is possible for a certain sociopolitical community. There must be a hierarchy: the worker assembly of the work organization must be stronger than the workers' councils of the OOUR's, and the same applies to relations among entities and officers in the professional management system. Otherwise the system disintegrates or is maintained at great pains. The enterprise cannot function if it is an optional association.

Decentralization of accumulation has above all created the material foundation for particularism and is the result of a strengthening of group (informal) ownership, accompanied by insistence on the uninfringed independence of the part.

OOUR-ization tends to favor the local technostructure (a larger number of supervisory slots with privileges) and local political communities (larger tax base, stronger control over the economy) rather than the workers. The workers have received the least from the creation of the OOUR's, Ostojic says. The breaking up of work organizations into a sizable number of autonomous OOUR's favors territorialization of the economy (the interests of local authorities) and a strengthening of its influences through arguments about the "technomanagerial" danger. Bureaucratization of the economy thus makes its way through the framework established by the Law on Associated Labor.

Ostojic deals extensively with this phenomenon in his statement. We will quote just one other observation of his: "Regardless of the organizational form of the OOUR, a great problem arises with important consequences. Since the professional technostructure which supposedly is responsible to the workers' councils for its decisions has been politically and ideologically anathematized, a stratum of the "political technostructure" has been created which formally or informally is "maintained" by the sociopolitical communities and sociopolitical organizations. The workers de facto do not conduct personnel policy of their own collectives--they neither appoint, nor do they dismiss. The self-management bodies mainly promulgate the decisions of the "management," and the latter hide behind the form of self-management. This detracts from the responsibility of managers and creates space for "incompetent voluntarism."

Competent management of the enterprise is not contradictory to self-management: the essential thing is that the worker caucuses and the workers' councils have the ultimate control over the operation of business management teams (through evaluation of their performance and through their election and dismissal). Promulgation (without a reasonable degree of direct self-management in the OOUR's as the only effective mechanism for real self-management)--that extreme formalization of self-management--ultimately "swallows up" self-management, he says, emphasizing that the essential program nevertheless does not lie in the organizational form, but in the power relations within the collective.

Old Story--New Flesch

Dr Zarko Papic, chairman of the Committee for Science of the Republic of Serbia, feels that the "booming" theses which saw the principal cause of all our problems in the very concept of the basic organizations of associated labor and of their association and linkage are dying out. He feels that the devaluation of these arguments has actually made an authentic constructive discussion possible.

He sees the basic problem of the economy's organization in the fact that "organizational forms do not 'cover' the actual economic relations and links in reproduction, and accordingly the necessary homogeneity of our forms of organization is lacking. The point is that the old organizational structure of our economy, with the conventional enterprise and so-called integrated entities (which was formed several decades ago under the impact of the political factor and on the regional principle) went through only a reorganization when the constitution took effect, and there were no changes in the directions of linkage and reproduction. Thus the old organization was broken down into OOUR's, but since as a rule it was not based on the logic of linkage and reproduction, it was difficult in its framework to arrive at the necessary homogenization at higher organizational levels.

"The problem is much more serious than a mere affirmation of the work organization as an organizational form. If the processes of association in the economy are to be affirmed in practice, and within that context if the work organization is also to be affirmed as an important level for homogenization of the conduct of business and development, there has to be a more radical reorientation of organizational ties, they have to be based on real flows of income in reproduction. It is more important, then, to build new work organizations than to strengthen the existing ones," Dr Papic observes.

Dr Miroslav Pavlovic, professor in the School of Economics at Belgrade University, is one of those who feel that the topic of reaffirmation of the enterprise has not been well formulated. The relations among the workers in the work organizations have been derived and must be derived from the production relations among the workers of the OOUR. Exclusiveness does not suit the nature of decisionmaking by the workers in the OOUR, nor its social character in the system of social reproduction, but rather it is compelled to open up through functional and institutional association and linkage. Alongside the question of affirmation of the work organization as an economic entity at the same level or with still stronger emphasis, then, he says, the question must

also be put of the overall self-management organization of associated labor, of the OGER above all. Have we not actually forgotten our basic points of departure as a society? Have we not forgotten why we objectively had to opt for the association of labor and had to break up the entrepreneurial structure in which social production was organized? Are we not fighting today for the conventional enterprise with its unwise patterns of business operation it implies, especially the kind of dimension of human relations and social status of the direct producer which keeps him alienated from the conditions and results of the production process?

Pavlovic strings these questions out one after the other and then in conclusion emphasizes his thesis in the form of a new question. Have we not adapted only in formal terms to the requirements of the constitutional organization of associated labor, while we are faced with the still more difficult problem of how to solve the long-range problems of our socioeconomic development on the foundations of association and linkage among the workers?

It is obvious that this opinion poll shows that there does not exist a unanimous opinion on what should be done and how it should be done either from the professional or the political standpoint. It is perhaps significant that the topic has been raised, that this has overstepped that blocking veto that has often prevented people from discussing the solutions that are in place, that is, has made them run the risk of being labeled opponents of self-management.

The Secret of a Distorted Ethics

But in spite of this unfavorable ideological climate a number of scientists and public figures have in the last 2 years indicated that perhaps the source of the difficulties does lie in certain elements of the system.

Dr Ljubisav Markovic, professor, began his statement in our poll with the assertion that scientific and ideological clarifications still have particular importance in our society. Certain issues have undoubtedly been thoroughly elucidated and expounded in political documents and discussions these past several years. Nevertheless, he asks, how is it that the country is falling into chronic stagnation in spite of its solid economic potential. The economic disruption can neither be explained nor eliminated by the ethics of economic and political entities. In that sense the results of government policy are convincing. It has instituted many administrative norms and restrictions, but it has not restored social reason either to prices or to credit, either to foreign exchange or to investments, virtually nowhere. Instead of economic equilibrium larger deficits have occurred in all domains of reproduction, the power of the administration is greater and greater, and there is a spontaneous upsurge of neostatism.

Under those circumstances the need for a more thorough clarification of our social movement, of its economic and political institutions, and of the manner in which it functions is imposed in and of itself. Do the existing institutions, the manner in which they are set up and reproduced, correspond to the condition of the productive forces of society, and where must the changes and adaptations be made? What should we open up room for on behalf of the progressive functioning of economic and social forces? Markovic asks.

The economic organization, in his judgment, has remained apart from the events in the economy that have been economically constructive. Instead of the OOUR's being economic parts of the economic organization, they have remained an independent factor with arbitrary behavior within it....

Aside from the deformation in the conception of the OOUR and its erroneous legal practice, other factors have also contributed to distorting the constructive idea of a socialist economy into its opposite. Those circumstances also include the very limited influence of the market for the existence of the OOUR and in general, the high level of government protection. We will not go into this now, but the economic consequences will not be avoided if the OOUR is glorified and becomes encapsulated with the capital of society it has derived from income, Markovic says.

The economic consequences are more evident at the higher level of the country's industrial development. On the one hand social capital is piling up in the OOUR's and is in part of foreign origin. On the other the OOUR's enjoy various privileges, and income is divided up according to the criterion of live labor, which is derived from a dogmatized conception. Social capital is eliminated as a factor both in the creation and also in the appropriation of revenues. This has, of course, thrust the workers into subjectivism both with respect to the use of social capital and with respect to the use of income. But it has also thrust into subjectivism all the government authorities which have unthinkingly drained off income for various purposes, overlooking social capital and its economic right to accumulation. That is the secret of the distorted ethics of public entities.

Dr Vujo Vukmirica, professor in the School of Political Science at Belgrade University, feels that putting the question of the work organization as an economic entity signifies tackling an entire set of issues vital not only to Belgrade and the Republic of Serbia, but indeed to our entire society. This problem is among the very urgent and subtle practical problems, but also theoretical problems, among problems concerning not only economic organization, but also political ideology. Vukmirica feels that the very posing of this question could signify the beginning of the end of practice after the pattern of "life travels through the woods, while documents, resolutions and the behavior of those in places of responsibility travel on the road."

This kind of behavior, he says, has been very costly, and the working people and party members are becoming less and less indifferent; on the contrary, they are feeling ever greater uneasiness. In his opinion the question of the work organization is the very marrow of our present and future problems.

It is not just organizations in the economy which have been OOUR-ized, Vukmirica says, but also those outside the economy, i.e., sociopolitical communities and sociopolitical organizations, even the opstinas and the committees have OOUR-ized themselves. In his opinion the "main road of stabilization" is freeing the economy of forces outside production and the economy which are doing violence to it. Speedy depoliticization of the economy is an urgent matter, Vukmirica says. He points out that up to the beginning of 1982 3 million self-management accords and social compacts had been concluded separating

the OOUR's from the market and orienting them toward sociopolitical agencies and communities which are shaping their destiny more and more. Restrictions, autarky and a closed door to the world cannot lead to the goal which is desired. Restrictions produce new restrictions, not new and more up-to-date products, he concludes, adding at the end: "Crossing the boundaries of the OOUR is a true exploit, an almost revolutionary act under our conditions!"

This gives some impression of the beginning of this strategically important discussion. In coming months it will certainly take place in the context of weighty economic, political and ideological arguments. It would be good if it were conducted analytically, sagaciously and calmly, without ideologization and unnecessary sparks. The only thing worse than that is not to begin the discussion.

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YUGOSLAVIA

WESTERN JOURNALIST NOTES POWERLESSNESS OF NATIONAL BANK

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 23 Nov 83 p 12

[Article by Viktor Meier: "The Impotence of the Belgrade National Bank"]

[Text] You enter the Yugoslav National Bank, housed on the top floor of Belgrade's main post office, via a narrow and shabby hallway. A sullen doorkeeper sitting in a niche in a wall evidently feels put upon while he yet indicates he is willing to report to the top that "some sort of journalists" had come. In the Balkans there normally is a strict parallelism between the dignity of a reception hall and the institution's importance in power politics. So one must conclude that the National Bank is not among those institutions that have a great deal to say in Yugoslavia. So it seems, precisely.

In a memorable nocturnal conference last summer the National Bank in Yugoslavia, legally charged with taking care of the country's foreign currency liquidity, was given the authority to call in foreign currency from all the banks in the country when the going got real tough so that foreign obligations due could be paid in time. In addition, a sort of special reserve fund was set up at the National Bank, fed on a continuing basis with the country's foreign exchange revenue. Before this ultimate National Bank guarantee comes into effect, however, which to foreign creditors, to be sure, is first and foremost, it is to be set down accurately in which sequence foreign debt due is to be redeemed: first comes the enterprise or bank that took the credit, then the local banks, finally the banks of the republic, and only then the National Bank; if there is lack of foreign currency below, it has to be reported to the top in good time. Furthermore, the National Bank generally has to supervise the commercial banks. The International Monetary Fund and the foreign banks had suggested that law, had even made it the condition for further credits, thinking that much of the economic chaos in Yugoslavia was due to that the country's top monetary authority could exercise no effective control over credits and money in circulation, neither domestically nor with respect to foreign debts.

It is already evident now that the Yugoslav National Bank will not be able to play that role. At the last central committee session late in October it was blamed for still letting itself be pushed around by the commercial banks in spite of its new competencies. The impotence of the Yugoslav National Bank is structural. In the 1970's it was federalized; it functioned due to the consensus principle among the republics. So it cannot possibly play a central role. That is prevented by the representatives of the republics in its organization. So

one cannot expect of the National Bank any impulses for economic reforms or the economic policy or even the finance policy. The executives are mostly of a political orientation; so is the governor. Given the structure of the bank, that is neither misguided nor inappropriate, yet the result of it all is that in Yugoslavia the monetary factors can only incompletely be activated to surmount the economic crisis. Talking with the National Bank indeed brings out nothing but dogmatic functionary tirades in the style of the 1950's about the private peasants and craftsmen who were doing all too well and who should finally be taxed properly (though up to now they hardly ever got the chance to do real work) and rosy views of the future to the effect that "next year" all Yugoslavs, entrepreneurs like private dealers, would surely no longer even consider hoarding foreign currency but (while there is a 50-percent inflation) resort to thinking in terms of dinars.

In view of such talks one cannot help but get the impression that the International Monetary Fund as well as the foreign banks have made it all too easy in the past for the Yugoslavs to get credits. Yugoslav commitments were hardly ever seriously checked. That has hurt Yugoslavia as much, as one can see today, as its creditors, perhaps even more, because it is easier for foreign banks to wait than for the Yugoslavs to pay off by instalment their circa 20 billion dollars in debt.

What is regrettable now is that precisely the International Monetary Fund has, to be sure, affirmed today there would be no more credits without binding terms that would have to be met, nor any "bail-out" like this year, yet says in the same breath that through this bail-out, in which Switzerland acted as the chief coordinator, one had "fortunately" found a procedure for western foreign countries, private banks and governments, to be able to assist Yugoslavia in the years ahead as well. Such incautious utterances have led to bad consequences before: In certain circles of functionaries the impression has been created that even next year one will be able to count almost automatically again on western financial assistance and the remission of debts, for which reason the so-called stabilization program, i.e. the reform proposals finally elaborated at the state presidium last summer by the Kraijger Commission, were not all that urgent. That hurts those who are advocating reform.

In fact, the reform appears to be getting stuck from the start. The Belgrade journal NIN warily asks in its last issue why the Federal Executive Council, which means the government, had not finally started with the reform bill, and it arrives at the conclusion that the government might not want to assume that responsibility since it does not feel sufficiently covered politically. The last central committee session in October produced not only resistance against the reform but even discord, even within the leadership. The Croatian leader Jure Bilic admitted that much, hardly disguised, to journalists in his republic. The plenum brought out, especially from the representatives of the eastern republics, headed by the Serbian top politician and current party chairman Draganav Markovic, merely talks in the traditional functionary style, without any real tackling of concrete proposals and measures. Contradictions appeared also among the republics, even within the republics, e.g. between leaders of the Serbian republic and the autonomous region of Vojvodina located inside Serbia. The Slovenian delegates warned against abandoning the consensus procedure only because at times it appeared rather inefficient.

The main thrust of the resistance against the reform becomes most apparent in the issue of the nature of economic enterprises. In 1974, under Kardelj's influence and on the grounds that self-management should have to be made relevant to the workers, the Yugoslav economy had been atomized into small "basic organizations." Later they discovered that this atomization had benefited, not self-management, but only the state interventionism in all sectors. The market economy, as demanded by the reform program, calls for strong, efficient and well-functioning enterprises of randomly chosen size. Yet the reform program could not adapt itself to that demand. Nor was it contained in the recommendations from the International Monetary Fund on which the reform program was largely based. At that, the needed unity of the Yugoslav market, bypassing all official treasuries of the federation, the republics and the communities, is impossible to create without naturally grown, stable and efficient enterprises. And now it turns out the communist functionaries do not want to go along. They are afraid enterprises and their managers would get out from under their control. And that would mean a loss in power.

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PETROLEUM INDUSTRY ACTIVITY IN 1982

Zagreb NAFTA in Serbo-Croatian Sep 83 (manuscript received 22 Jul 83) pp 507-516

[Article by Ifet Ibrahimasic, mining engineer, doctor of engineering science, employed by INA-Naftaplin, nonstaff full professor at the School of Mining Geology and Petroleum of Zagreb University; Nikola Cizmic, mining engineer, chief engineer of the Development Department of INA-Naftaplin; Damir Rajkovic, engineer, MA in engineering science, teaching assistant at the School of Mining Geology and Petroleum of Zagreb University; and Milan Mladenovic, mining engineer, vice chairman of the Business Committee of the OOUR [Basic Organization of Associated Labor] "Technology" within the RO [Work Organization] Naftagas, Novi Sad]

[Text] Petroleum and gas production in 1982 remained at the level from 1981, which means that success was achieved in making up only for the so-called natural drop in production, which averages 8-10 percent per year.

Thus total production in 1982 was $4,350 \cdot 10^3$ tons of petroleum and 2.2 billion m^3 of natural gas.

This production was achieved mainly from existing fields, since the confirmation of new ones and activation of reserves already proven have been slowed down considerably because of the lack of financial resources. For that reason the amount of drilling has been reduced considerably, which has been reflected in the effectiveness of explorations and field development.

The problems in purchasing imported equipment, supplies and tools have been a principal characteristic in exploration for and production of petroleum and gas in 1982, which has been reflected in the overall activity not only of drilling, but also of other activities, indeed even at the level of actual production of petroleum and gas.

1. Survey of the Activity of INA-Naftaplin in 1982

The activity of INA-Naftaplin in 1982 took place in the context of an exploration for the most efficient model of financial and economic operation. Optimum determinants were, of course, carefully incorporated into the analysis in view of the pattern of economic development as the origin of coordinates

of its future prosperity, since lines of sight may diverge from or converge on those which characterize society's real needs.

In these considerations, it might be said, internal and external interests have been reconciled to the possible coincidence, which is not exactly a simple matter to achieve, not even in a case of available selection of lines of development within which differing interests conflict, i.e., interests ranging from those ephemeral interests, by way of exclusive and unrealistic interests, to those realistic interests of visionaries. The basic premise in the future development of the domestic petroleum industry, which is bound up with petroleum extraction within the country, follows a priori from reliance on these factors:

i. exploration of the space all over our land area and sea area to the point of achieving the relevant level of exploration, which needs to be defined in a scientific geological conception from which it is possible to determine the optimum intensification of the process of exploration;

ii. since this is an interdisciplinary scientific-professional process, its engineering and technological structure must be altogether anticipated so that it follows from realistic assessments of the need to develop the various technological segments (laboratory work, special technical equipment and tools, measuring instruments, operating equipment, production supplies, spare parts, etc.) whose weighting in the chain of the technological process can make that process uniform both from the standpoint of economic efficiency and also with respect to what it promises concerning the stability of overall economic development, which is relying on our own sources of energy within the country;

iii. in view of the rather scanty new results of exploration achieved over the last 10 years or so, the level of production attained in INA-Naftaplin's petroleum exploitation needs to be maintained at a level that must not signify a deterioration of the economic difficulties that already exist in the country. To achieve that it has been and still remains necessary for the natural resources underground, i.e., petroleum and gas, to be continuously exploited not only in conformity with the natural requirements of physical and energy balance, but also according to the additional exact law which in the RO INA-Naftaplin finds economic management of natural mineral resources, rather than it be subject to the requirements of the momentary situation of excessive consumption and deficient possibility of supply on what is in any case a slippery economic market. It is especially important to bear this in mind because of the layman's conception held by a large number of people who though of mature age are not informed, i.e., to the effect that oil wells are "pipes" which can be opened and closed as one wishes. This absurd opinion must be opposed by patriotic economic performance on the part of professionals in whose capillaries pressure pulsates which, just like reservoir pressure, must not be used by anyone for palliative payment of interest on credit. After all, regardless of the problematical economic situation, optimum economic management of natural gas must be inherent in the use of sources of energy, even when we are dealing with permanent, that is, inexhaustible, sources of energy. Yet hydrocarbon pools are limited and nonrenewable natural

resources representing deposits of raw energy minerals which belong to society.

Results Achieved in INA-Naftaplin's Activity in 1982

Drilling Results

Table 1. Results of Drilling in INA-Naftaplin in 1982

Element	1981	1982
1. Total drilling in meters	201,673.0	179,498.5
a) Exploratory drilling for petroleum and gas	80,676.0	71,371.0
b) Development drilling for petroleum and gas	120,997.0	108,127.5
2. Number of wells drilled	122	109
a) Exploratory drilling for petroleum and gas	45	37
b) Development drilling for petroleum and gas	77	72
3. Drilling success:		
a) Total wells drilled	122	109
b) Positive for petroleum and gas	69	57
c) Dry (negative) wells	28	28
d) Wells being tested and also new projects	25	25
4. Number of drilling rigs in operation	16.49	16.67
5. Meters drilled per rig	12,230.0	10,768.0

Table 1 presents the results of drilling in INA-Naftaplin in 1982. The results represented 97.8 percent of total planned drilling in 1982 (183,596 meters). The causes of this slight shortfall are related to difficulties in purchasing production supplies which facilitate the optimum drilling process and the drilling of deep wells. However, in spite of that fact, the ORESAC-2 well was drilled to 5,902 meters in 1983; in early 1983 it was completed with a final depth of 6,102 meters. This is the deepest well in Yugoslavia to date.

A special cooling technique was used in drilling this well under very complicated conditions of enormously high temperatures and pressures (temperature gradient 4.5° C per 100 meters); that technique made it possible to do electric logging successfully, to cement the strings of casing and to perform other technological procedures related to testing and developing the well. Thus a natural obstacle in mastering great depths in the Pannonian Basin, where gas deposits have been discovered, was overcome by using our own solution.

In the area of the Southwest Adriatic exploratory and development drilling was done from the platform "PANON." Numerous gas deposits located at scattered points have been discovered. Among them the deposits IKA and VANA distinguish themselves as the most suitable for possible exploitation. An exploitation project is being designed which would cover a number of technological areas, i.e., from a program for consolidating loose sand containing gas, including the collection of gas on stable platforms, all the way to transport to the mainland or to the most suitable user.

The semisubmersible platform "ZAGREB-1" began operation in the area of the middle Adriatic drilling the J-13 deep exploratory well. By the end of 1982 a depth of 1,212 meters had been reached. The anticipated depth of that well, depending on the geological research data, will probably exceed a depth of 4,300 meters (a depth of 4,644 meters has been reached).

Once the drilling of the J-13 well was finished, the platform "ZAGREB-1" began to work in areas around Mljet, Palagruza and Jabuka. Foreign partners are also taking part in these projects under a joint venture agreement with foreign companies in exploring hydrocarbon deposits beneath these areas of the Adriatic (JOINT VENTURE AGREEMENT BETWEEN INA-NAFTAPLIN, i.e., its OOUR MLJET, PALAGRUZA and JABUKA, and the foreign partners AGIP, CHEVRON, TEXACO and HISPANOL). INA-Naftaplin will explore the remaining areas under the middle and southern Adriatic with interested Yugoslav economic organizations.

It is characteristic of INA-Naftaplin's activity in exploratory and development drilling that the OOUR "Drilling" overcame in 1982 all difficulties of an engineering and technological nature with its own engineering personnel, and in so doing large progress was made in mastering a great deal of domestic equipment.

Results in Petroleum and Gas Production

Table 2 presents the results achieved in exploitation of fields in SR [Socialist Republic] Croatia, which is where INA-Naftaplin operates. The planned volume of petroleum production in 1982, which was 3,048,000 tons, was almost 100-percent achieved. Production in 1982 was down 93,583 tons from 1981. However, taking into account the definite difficulties of equipping and repairing the wells and of including new wells in the process of field exploitation, last year's production was nevertheless satisfactory. That is, it should be borne in mind that all the petroleum is being extracted exclusively from old fields which are kept under constant supervision and whose rate of flow is regulated in a functional dependence on optimum exploitation of the energy system in every field. This approach is, of course, necessary with respect to achieving the optimum final extraction of hydrocarbons from petroleum reservoirs. Consequently, in spite of the financial, technical and production difficulties, successful results were achieved in petroleum production in 1982.

The situation is somewhat more favorable with gas production in 1982. These figures are also presented in Table 2.

The problems related to exploitation of gas deposits have to do with repair work on the CPS [(?) Central Pumping Station]-Molve and the ethane installation. Because of the lack of supplies and spare parts compressor stations were not serviced promptly in the Sandrovac, Struzec and Ivanic-Grad fields.

However, in spite of all the difficulties (imported equipment and supplies, lateness in adoption of domestic solutions, and so on), gas was supplied to consumers in 1982 according to contractual obligations.

Table 2. Petroleum and Gas Production in INA-Naftaplin in 1982

Element	Actual Production	
	1981	1982
Petroleum in tons	3,140,777	3,047,194
Gas in thousands of m ³		
a) Natural gas	784,061	974,800
b) Casinghead gas	384,867	269,700
Total (a + b)	1,168,928	1,244,500
Liquefied gas in tons	81,111	116,317

Construction of the 508-mm (20-inch)-diameter gas pipeline between Ivanic-Grad and Kutina for more reliable supply of gas to the TUG-II Factory in Kutina and the Sisak distribution area was the most important thing in the gas system. During the year new consumers were also connected in Slavonska Pozega and the "Djuro Djakovica" firm in Slavonski Brod.

A total of 116,317 tons of liquefied gases were produced in 1982, which is all of 43 percent more than output in 1981.

And then the ethylene installation was entirely completed and put into pilot production. The first quantities of ethylene, then, began to flow, then, in 1982.

Repair Work in 1982

The OOUR "Repairs" of INA-Naftaplin conducted its activity at 742 wells. It treated and tested 224 spaces in oil and gas reservoir rocks in 88 wells on land and 32 spaces in gas reservoir rocks in 5 wells in the offshore Adriatic. Compared to 1981, the amount of repair work in 1982 increased by 62 jobs. Two new pieces of equipment (Skytop-III and Skytop-IV) were put into service, and the old repair rig Magirus-III was reactivated as well. However, repair work was also curtailed because of imported equipment, and domestic equipment mostly arrived late. Nevertheless, thanks to better organization of work, application of our own solutions and self-sacrificing work that involved many sacrifices, petroleum and gas production achieved in 1982 was accomplished mostly through the creative activity of the OOUR "Repairs."

Special Reservoir Engineering Work in 1982

In view of the great diversity of jobs done in the OOUR "Special Reservoir Engineering Work" (Sector for Reservoir Engineering Technology, Sector for Well Logging, Maintenance Sector, Transport Sector and Telecommunications Division), considerable progress was made in 1982 over 1981. Since the work done by the OOUR "SRR" is related to all the OOUR's in INA-Naftaplin, it is clear why specialized equipment (units, measuring apparatus, vehicles for carrying cement, acid and other supplies, workshop and field maintenance of installations, maintenance of communications, etc.) were involved in the technological process of INA-Naftaplin throughout 1982. From jobs on land to those at sea the OOUR "SRR" overcame many obstacles it confronted in 1981.

with its own technical interventions. The pace of work done by the OGP "GEP" in 1982 was extremely strenuous.

The demands for solution of increasingly complex engineering problems in practice (the great depth of the wells, cementing casing strings, electric well logging at high temperatures, the testing of reservoir rocks, hydraulic fracturing of rocks, treatment of rocks with acids and surface-active agents, sand bridges, etc.) represent a very great preoccupation of numerous specialists in the interdisciplinary field of petroleum reservoir engineering. Thanks to research and study projects, accompanied by laboratory verification, it will be possible to find the optimum limits on development of the process of exploration and exploitation of hydrocarbon deposits within geological areas and also areas which are economically advantageous. In this way even the so-called small deposits are passing over into the sphere of social interest.

OGP "GEP" [Geological Exploration]

The activity of this OGP in 1982 covered all the regions of interest in SR Croatia: the Pannonian Basin, the Adriatic seabed and the Dinarids.

Exploratory drilling done in the Drava, Sava, Slavonian Srem and Mura basins and depressions (all belong to the Pannonian Basin) involved the drilling of 24 wells to a total depth of 55,059 meters. Of these, 13 revealed rocks saturated with hydrocarbons, 7 were dry and 4 are in the drilling stage.

Geophysical conditions have a particularly important role in the location of the wells. A quite dense network of regional wells is obtained by reflection shooting. In the Pannonian Basin about 1,280 km of seismic profiles were mapped, about 286 km by "vibroseis." Detailed gravimetric measurements were made at 4,675 points and 200 magnetometric measurements (Karlovac zone).

Activity of the OGP "GEP" in the offshore Adriatic has been related to the need to define geological data, especially in the region of the Istrian shelf, where well drilling totaled 11,670 meters. The so-called key well Istra More-1 [Istria Offshore-1], which has been drilled and tested in this area, is interesting. With the tests run at the Istrian well Jadran 7/8, it can be said that geological exploration of locality 7 has been completed. The previous geological-and-geophysical data on the presence of gas were confirmed on the basis of the data obtained, and it became possible to calculate the geological reserves of gas.

Exploratory drilling was also done in the promising localities 15 and 16. Well 15/1 established the presence of gas, while well 15/1A, on the line marking off the area which belongs to Italy, revealed 13 gaps in the rocks, no influx of gas being achieved from the 5 deeper ones, but an abundant flow was established from the 7 shallower ones.

In 1982 drilling began in the area of the Dugi Otok Basin (Kornati More-2) [Kornati Offshore-2], i.e., by drilling the well Jadran-13, and a depth of 1,117 meters had been reached by 31 December 1982. Drilling is being done in

this region from the platform "ZAGREB-1," i.e., where the depth of the sea exceeds 90 meters.

In preparation for exploratory drilling in the regions in the vicinity of the islands Jabuka, Palagruza and Mljet, where INA-Naftaplin activity has been taking place through the OOUR whose name refers to those islands, along with investments by foreign companies, seismic and magnetometric profiles were mapped in 1982 over a total distance of about 8,500 km. - These geophysical operations were conducted from the vessel "Junak."

With respect to using gas pools below the seabed of the southwest Adriatic intensive work is being done on a project which has included numerous engineering and technological problems which have to be resolved for the gas pools discovered to be brought into production. This especially applies to locality 18 (the IKA field) and locality 7 (the IVANA field).

The activity of INA-Naftaplin (OOUR "GIR") in the Dinarid region has been cut back because there is a need for additional geological studies, especially for reinterpretation of the previous data on the basis of up-to-date knowledge. That is why it will be necessary to do additional geophysical mapping. And then, since the possible accumulation of hydrocarbons is expected at considerable depths (below the anhydrite-carbonate complex), where hydrogen sulfide also occurs, it is urgently necessary to resolve a number of engineering and technological problems related not only to equipment, but also to new investments of sizable financial resources.

INA-Naftaplin Activity (OOUR "GIR") in the Domain of Exploitation of Deposits

With respect to the drilling of development wells, 65 of the total of 72 were completed in 1982. All of these wells are located in fields from whose deposits hydrocarbons are being exploited (17 fields).

Well logging and interpretation of the data obtained had especial importance in those projects. In view of the very complicated natural conditions (high pressures and temperatures and so on), numerous technological procedures of our own were introduced to facilitate achievement of effective results in drilling the development wells. Along with the activity of development drilling mentioned, secondary methods of pool exploitation had particular importance to the process of pool exploitation, i.e., to petroleum and gas production achieved in 1982; they were applied in the following fields: Ivanic, Zutica, Benicanci and Sandrovac. Fields prepared for the use of secondary methods of recovery included Bilogora, Jamarica, Lipovljani and Kozarica.

Numerous small oil and gas pools which have been discovered are now in the phase of initial development. They also include those discovered in the southwest portion of the Adriatic.

The degree of depletion of deposits which are under production is approaching the value of about 23 percent. Maintenance of the level of petroleum and gas production achieved in 1982 and exceeding it will be possible in the future by bringing under exploitation new deposits already discovered and also those which possibly will be found.

Special Activity of INA-Naftaplin

Along with geological exploratory drilling, INA-Naftaplin has achieved notable results in its activity to explore for geothermal energy. That is, valuable geothermal aquifers have been discovered in the Pannonian Basin whose thermal energy potential might be economically exploited even in the foreseeable future.

Activity of INA-Naftaplin Abroad

This activity has been taking place continuously for quite a lengthy period now. In 1982 it covered the following areas:

Gabon. In the region Cama Marin, i.e., in the coastal waters of Gabon, INA-Naftaplin drilled a second well, the Cama Marina-2, to a depth of 3,850 meters, as the operator, along with the participation of other partners. This well did not yield the results anticipated. Because this region is promising from the standpoint of finding hydrocarbon deposits, additional seismic shooting needs to be done. INA-Naftaplin submitted a request in the name of all participants in this exploration for the Gabon Government to grant a 1-year extension to the contract. However, no response has been obtained to that request as of 31 December 1982.

Democratic People's Republic of Korea. There has been a work site in that country for the purpose of bringing in other partners for joint exploration of an area in Interblock "C" offered by the Korean Government. Since no appropriate partner has been found, INA-Naftaplin's work site in the Democratic People's Republic of Korea was terminated at the end of April 1982.

People's Republic of China. Because of the lack of foreign exchange INA-Naftaplin did not respond to the invitation of the Chinese National Petroleum Company with its bid for exploitation of deposits along the Chinese coast, although it participated in the seismic mapping in the Yellow and South China Seas in the vicinity of Hainan Island.

Indonesia. INA-Naftaplin had a 20-percent share in exploration of the region North Sakala in the East Java Sea. Following interpretation of the seismic data two wells were drilled, revealing hydrocarbons in traces. It will be possible to make a decision on the future activity in this region through additional seismic shooting.

Angola. INA-Naftaplin had a share of 5 percent in exploration of deposits in that country on the basis of investment of its capital. Since the Palanca field was discovered, explorations have continued and development drilling has been done. The anticipated results were obtained from five of the six wells. Commercial reserves of petroleum were ascertained at two wells (the Palanca and Pacassa fields). In view of the results achieved, a large number of parties are showing an interest in this work. Additional seismic shooting will be done, and offshore drilling will probably begin in early 1983; INA-Naftaplin will have a share of 7.5 percent in that work.

Iraq. INA-Naftaplin is doing drilling in Iraq for the host company INOC. Shallow drilling has even been done. The Naftaplin crew of specialists is training Iraqi personnel to work on their own on Iraqi drilling rigs.

As far more extensive activity of INA-Naftaplin abroad, by and large it has been curtailed by the shortage of foreign exchange. However, there are diverse possibilities still open for INA-Naftaplin's activity abroad. That is why a optimum determination should be made of them and they should be effectively taken advantage of.

2. Naftagas Activity in 1982 in Explorations for Hydrocarbons and Geothermal Energy

Introduction

All of Naftagas' activities took place during 1982 under extremely more difficult economic conditions. Looking at things generally, all the predictions concerning economic developments in the direction of recovery were not realized, and this had an essential impact on the overall operating results of the country's economy as a whole.

Along with all this, inflationary trends brought about unbalanced consumption, and all forms of consumption have been growing faster than production and beyond real capabilities.

In view of all the circumstances referred to above under which the RO Naftagas operated in 1982, we can note that very good results were achieved in all sectors of activity.

The Work Organization Naftagas includes nine basic organizations and two work communities and employees 4,471 workers. R&D programs are carried out in one basic organization ("Technology"), operational work in five basic organizations, and four basic organizations of associated labor have been created on the regional principle for petroleum and gas production, thermomineral water and geothermal energy.* Gross income in 1982 amounted to 23,677,615,000 dinars, and net income 11,861,595,000 dinars.

Geological and Geophysical Work

Activity in the fields of geological and geophysical prospecting took the following forms:

- I. hydrocarbon explorations in Yugoslavia;
- II. hydrocarbon explorations abroad; and

* The term "subsurface water" is used for water regarded as a raw mineral (Law on Exploration for and Exploitation of Raw Minerals of the Socialist Autonomous Province of Vojvodina, SL. LIST SAPV [OFFICIAL GAZETTE OF THE SOCIALIST AUTONOMOUS PROVINCE OF VOJVODINA], No 4, 1977). The most suitable expression is "thermomineral water and geothermal energy," but its usage is not widespread as yet.

III. explorations for thermomineral water and geothermal energy and preparation for their exploitation.

These activities were preceded or accompanied by certain activities involved in appropriate geological and geophysical preparations in the form of studies, analyses and mapping, the drafting of studies and the preparation of projects.

Hydrocarbon explorations in Yugoslavia were conducted mainly within SAP [Socialist Autonomous Province] Vojvodina, and to a considerably lesser extent (preliminary geological and geophysical testing) in the area of Serbia proper.

Reflection shooting was done in 1982 in areas of SAP Vojvodina extending over 1,005 km by the method of multiple overlapping (1,200 percent and 2,400 percent). Geoelectric mapping was done at 50 holes, and the plan for three-dimensional seismic testing was fulfilled. All of these operations were carried out in Srem (Brtkovo, Karakusa and the vicinity of Erdevik) and certain localities already being explored.

Geochemical studies (organopetrographic and organochemical) of the content and type of organic substance, of the level of thermal changes (maturity), and of the petroleum-gas potential were run on 46 samples from 19 wells over the entire territory of Banat and Srem, approximately one-half of the samples belonging to the Mesozoic and the other half to Neocene sediment.

The plan for 1982 called for doing the following in SR Serbia:

I. detailed geological prospecting of the area Smederevo--Azanja--Vel. Plana (with 50-percent participation by Naftagas), and

II. prospecting of oil shale in the areas Monica, Vranje, Kursunlija and the Senonian tectonic trench (with Naftagas' participation 10 percent of costs).

There were difficulties of a formal nature in carrying out these operations, but they were overcome, and beginning 1 August 1982 the operations have been proceeding at a normal pace. All the field explorations have been completed, and the technical documentation contracted for was completed by 31 March 1983. The planned explorations of oil shale have not been completed, since the material preconditions for this were achieved only in late December 1982.

Activities for hydrocarbon exploration abroad continued in Algeria and Angola, and explorations in Gabon and Tunisia were brought to an end.

It is probably well known that in Gabon, Tunisia and Angola Naftagas was collaborating with Naftaplin with a portion of its capital, while in Algeria it was acting on its own.

The leases expired on the areas for exploration in Gabon and Tunisia, while in Angola the work has been offering attractive results and is undergoing expansion. However, difficulties have arisen in financing these operations which RO Naftagas cannot resolve by itself.

As for geophysical work done abroad, reflection shooting has been done in Angola (7,065 km), and the preparations have been made for the same work in Algeria. Aeromagnetic prospecting has been done in Angola in blocks I and III (basic network 3 x 6 km), and in block III an additional 3 x 3-km network.

The completed work of geological-geophysical synthesis represents the basis for all drilling and testing work done during 1983.

Exploratory Drilling

Naftagas has been doing deep exploratory drilling as part of its explorations in Yugoslavia, explorations for hydrocarbons abroad for its own needs (Gabon, Tunisia, Angola and Algeria), and in explorations for the Jordanian National Company (NRA).

Of the total of 10 exploratory wells planned in the area of northern and central Banat 9 were completed, 3 of them positive for hydrocarbon content, 3 positive for purposes of thermomineral water and 3 were negative and were eliminated.

Contour exploratory drilling was done at seven wells in SAP Vojvodina, five of which were completed with flow string, one was eliminated as negative and one was left to meet hot-water needs.

Naftagas did exploratory drilling for hydrocarbons abroad on its own account in several countries of Africa with a varying amount of participation. In Algeria Naftagas is carrying out exploratory work in two exploration areas on its own.

In Tunisia two wells were drilled, and both were eliminated as negative for hydrocarbon content. The contract covering these explorations has expired, and the work is under way to leave the concession.

In Gabon one exploratory well was drilled which was also negative for hydrocarbon content and was liquidated. The contract on exploration has also expired here, and the last work is being done to leave the concession.

In Angola 11 wells have so far been drilled, 6 of which yielded commercially positive results, 4 have not been tested, and only 1 is negative. Two deposits in block III have been found commercially positive and are in the phase of preparations for exploitation. The problems which have arisen in financing further exploratory work and in keeping up with investment in production are insurmountable, and only the rapid intervention that is still possible by agencies of the Federation and the National Bank can prevent us from losing partner's rights because of obligations which have been exceeded. A mechanism must likewise be furnished and put into smooth operation for successive settlement of obligations on work while it is under way.

One well has been drilled in Algeria. It yielded some results for the content of hydrocarbons (gas), but the quantities were commercial, and the well was eliminated.

One drilling rig and one service rig were involved in exploratory drilling, testing and explorations for the national company of Jordan.

During 1982 five wells were drilled in Vojvodina to explore for and to produce thermomineral waters, while seven were planned. The discrepancy occurred because of general restrictions on investments in the province, and the users were unable to bring their programs into conformity with this plan because of lateness in construction of facilities for use, but also because potential users were not sufficiently informed about types of use and their benefits.

Table 1

Element	1981	1982
1. Total drilling in meters	128,673	125,204
a) Exploratory for petroleum and gas	56,571	12,517
b) Exploratory for subsurface water*	4,946	3,808
c) Development for petroleum and gas	72,102	89,279
d) Development for subsurface water	—	—
2. Number of wells drilled	79	78
a) Exploratory for petroleum and gas	74	16
b) Exploratory for subsurface water	6	1
c) Development for petroleum and gas	59	57
d) Development for subsurface water	—	—
3. Drilling success:		
a) Positive for petroleum and gas	56	51
b) Positive for subsurface water	5	5
c) Negative	5	10
d) Being tested for petroleum and gas	13	3
e) Being tested for subsurface water	—	—
4. Number of drilling rigs operating in the country	10	10
a) For petroleum and gas	10	9
b) For subsurface water	—	—
5. Number of drilling rigs abroad	—	1
a) Operated abroad (service)	—	1 (Jordan)
b) Leased (foreign)	—	1 (Afghanistan)
6. Meters drilled per rig in Yugoslavia	13,996	13,522
7. Number of service rigs	—	—

* Exploratory drilling for subsurface water has already been included in total exploratory drilling in 1981, which was not the case in 1982.

It is significant here that large numbers of users have decided on recreational tourism, which in the conceptions of Naftagas represents the lowest level and last phase in use of the total thermal energy potential.

Although in addition to what we have said there are also problems in the system that have not been cleared up, the following systems are in preparation or work is being done to equip them:

Melenci, spa recreation center
Kula--recreation
Kula--energy (factory)
Prigrevica--spa recreation
Srbobran--energy (greenhouse)

In collaboration with other participants (the armed forces, the Self-Managing Community of Interest for Geological Explorations, the "Fruska Gora" National Park, etc.) detailed hydrological explorations of the Fruska Gora region will be undertaken for various purposes.

Each of the participants in explorations will thereafter continue that part of the program which fits into its general conceptions of development. For Naftagas the programs here again are focused on thermal water as a carrier of geothermal energy.

Development of Deposits

In the operational domain of field development in 1982 work was done to prepare new capacities for production, to prepare a pilot test for additional methods of petroleum recovery, and work to reinterpret deposits being exploited, along with accompanying activities for various purposes.

Development drilling was done in a larger amount than planned, so that 57 wells were drilled instead of 45, and drilling amounted to 89,280 meters instead of 74,850 meters. Only three wells were negative. All these wells were completed, or existing networks of wells are being rounded out.

Service operations in development and exploration were in large part unable to keep up with the pace of development drilling during the year for the following reasons: unsuccessful primary cementing of flow strings, which necessitated a lengthy stay because of recementing, the shortage of perforation materials, of additives for muds and cement mixtures, acids and other chemicals for treatment of strata.

Given the obligation to prepare a sufficient volume of new production so as to cover the natural decline of existing capacities, these circumstances created a psychological climate of uncertainty and insecurity.

It was possible to do a large amount of work processing data because computer equipment has long been in use, beginning with the processing of logging data, the monitoring of production and other separate programs, all the way to building models of entire fields.

Petroleum and Gas Production

The plan for production of crude petroleum in the fields of Naftagas in 1982 was fulfilled in its entirety. Output was 1,303,284 tons, which is 3,284 tons more than planned. Fulfillment of the plan was not a simple matter, since because of the generally known difficulties throughout the Yugoslav economy it was not possible to bring all activities into conformity with all

the production conditions in good time. Under such conditions it amounts to an exploit to produce 4.7 percent more than in the previous year (1981).

There were quite a few difficulties involved in the production of gas. The volume of output totaled 982,787,363 m³, which is a 7.4-percent drop from the previous year (1981), and it occurred because of the unwillingness of facilities which are the consumers, above all in Serbia proper, to accept the planned quantities from domestic production in Vojvodina and imports for the eastern part of the country. Natagas therefore had very great problems of a technical and technological nature, but there were also consequences in the domain of economic and financial problems.

The overall results achieved are considered to be favorable and ensure a good basis for fulfillment of the plan for 1983.

Yugoslav producers have furnished appropriate substitutes for a large portion of the needs of production for additives and chemicals. The minor portion for which solutions have not been found in this way has created an uninterrupted atmosphere of uncertainty. The solutions have come at the last moment, and that is the reason why there was no more serious impact on the volume of production as a whole.

Table 4

<u>Element</u>	<u>1981</u>	<u>1982</u>
1. Petroleum in tons	1,244,459	1,303,284
2. Gas in thousands of m ³	1,061,220	982,787
a) Natural gas	867,894	775,294
b) Casinthead gas	193,326	207,493

Capital Construction

During 1982 capital investment activities were conducted under 58 different programs and projects to meet the needs of producing petroleum and gas, thermomineral water and geothermal energy. They encompassed the construction of new technological gathering and feed systems and expansion, enlargement, reconstruction and replacement of existing ones.

In that same period activities began on the same equipping of geothermal systems which did not take place in previous periods. Yugoslav producers and suppliers furnished the equipment and material for a large portion of these projects. However, in cases when an imported component had to be adopted, there were holdups and delay of completion of project construction. Some of the programs referred to in the number given above were prepared precisely because of the need to provide equipment for new projects through reconstruction of old ones.

Other investment activities on the principle of joint ventures or the pooling of labor and capital for specific purposes commit the same volume of investment taken together as those which have direct importance to petroleum and

gas, thermomineral water and geothermal energy and have elements of influence of sociopolitical communities.

Basic Organizations Carrying Out Operations

The basic organizations of associated labor carrying out operations were created from the specialized departments several years ago and have a high capability in terms of physical resources and personnel for carrying out specialized work assignments of the greatest complexity. We are referring here to "Drilling," "Special Jobs," "Hydroprobe," "Maintenance" and "Construction Work." Each of these organizations has developed and been equipped in the period up to now solely to meet the needs of Naftagas. In 1982 the long-prepared entrance on the international market began. In this period this in part was felt only in terms of the volume of work done within the country, but this will be avoided in the coming period.

At the moment one drilling derrick and one service derrick for work in the wells are operating in Jordan. Activities are under way involving "Maintenance" in Algeria, "Hydroprobe" in Mali, Libya and Iraq. Incidentally, all the work assignments which have been set within the country are being performed very effectively, even under the kind of conditions we have at the moment in the country. Among them all we would distinguish the readiness and preparedness of "Special Jobs" to carry out all operations at wells on the principles of up-to-date technology and "Maintenance" as an operator and as a coordinator in the maintenance of all equipment, in the creation of new equipment, in replacement of imported equipment by domestic equipment and as a producer of all necessary spare parts for all activities of Naftagas.

The increase in the number of untested wells and the longer intervals in phases of exploration are not the result of the operator's ignorance and inability, but above all because of restrictions in the supply of the necessary materials.

Review of Activities in 1983

Production for 1983 was planned at 1,274,300 tons of petroleum and 1,08,216,000 m³ [sic] of gas. The volume of exploration in Yugoslavia is dropping off somewhat, but plans call for continuing the explorations begun in Algeria and Angola assuming the necessary conditions can be provided for. Plans also call for continuation of activity to prepare production in Angola together with Naftaplín. The volume of services is at approximately the same level as in the previous year.

The general assessment back when the plan was being prepared and at the time when it was adopted was that the physical volume of production and services had been planned at a level that exceeded the realistic capabilities for fulfillment under the conditions of the present relations in the Yugoslav economy. This pertains both to exchange-balance positions to meet the needs of exploration and production within the country, which indeed are not large, but they are insurmountable, as well as for services and operations involved in exploration and preparation of production abroad. It is the same situation

with all goods of suppliers within the country; either deliveries are made contingent upon sharing in the foreign exchange, or they cannot be obtained at all, since the suppliers are forced to export before meeting domestic needs.

Table 5. Drilling Results in Yugoslavia in 1982

<u>Drilling Results</u>	<u>1981</u>	<u>1982</u>	<u>Index 82/81</u>
INA-Naftaplin			
1. Total drilling done in meters	201,673	179,499	89
a) Exploratory drilling	80,676	71,371	88
b) Development drilling	120,997	108,128	89
2. Number of wells drilled	122	109	89
a) Exploratory	45	37	82
b) Development--petroleum and gas	77	72	94
3. Drilling success	122	109	89
a) Positive wells	74	62	84
b) Negative wells	48	47	98
c) Share of negative wells in total wells drilled in percentage	39.3	43.1	--
4. Number of rigs in operation	16.49	16.67	100
5. Number of meters drilled per rig	12,230	10,768	88
Naftagas			
1. Total drilling done in meters	128,673	121,696	95
a) Exploratory drilling	56,571	32,417	57
b) Development drilling	72,102	89,279	124
2. Number of wells drilled	74	73	99
a) Exploratory	25	16	64
b) Development--petroleum and gas	49	57	116
3. Drilling success	74	73	99
a) Positive wells	53	61	115
b) Negative wells	21	12	57
c) Share of negative wells in total wells drilled in percentage	28.4	16.4	--
4. Number of rigs in operation	9.2	9.0	98
5. Number of meters drilled per rig	13,986	13,522	97
Total			
1. Total drilling done in meters	330,346	301,195	91
a) Exploratory drilling	137,247	103,788	76
b) Development drilling	193,099	197,407	102
2. Number of wells drilled	196	182	93
a) Exploratory	70	53	76
b) Development--petroleum and gas	126	129	102

Table 5 (continued)

<u>Drilling Results</u>	<u>1981</u>	<u>1982</u>	<u>Index 82/81</u>
3. Drilling success	196	182	93
a) Positive wells	127	123	97
b) Negative wells	69	59	86
c) Share of negative wells in total wells drilled in percentage	35.2	32.4	--
4. Number of rigs in operation	25.69	25.69	100
5. Number of meters drilled per rig	12,859	11,724	91

* It was assumed that 20 percent of the wells being tested would be positive and 80 percent negative.

The reduction in the volume of exploration will not directly bring about a reduction in the volume of production this year and next year, but somewhat later.

Achievement of the planned volume of petroleum production in 1983 could be jeopardized by late deliveries, above all of production supplies and other goods we have mentioned, but Naftagas is making exceptional efforts and is undertaking extensive precautionary measures to prevent this.

Fulfillment of the plan for gas production will certainly be more problematical, since the same factors will be operative in the first half of the year as in 1982. In the second half of the year distribution and consumption systems will be completed, domestic production will be normalized in Naftagas fields, but this will not make up for what was not done in the first half.

It is felt by people in Naftagas that in spite of the adverse overall trends during 1982 and in the first half of 1983 there will be certain more progressive developments which, along with the measures of federal bodies and agencies, would have quite a constructive impact toward normalization of business related to exploration within the country and abroad and toward maintaining the present level of production within the country.

3. Results of Drilling in Yugoslavia in 1982

Overall results of drilling in 1982 are on the average as much as 15 percent poorer than in the previous year (Table 5). This applies both to the meters drilled and also to the number of wells drilled, as well as drilling effectiveness expressed in the number of meters drilled per rig.

One can cite as the main reason for the results the markedly difficult situation in purchasing supplies, equipment, spare parts, tools, etc., resulting from the country's very adverse balance of payments and exchange balance.

Exploration of the deeper structures of the Pannonian Basin also results in considerably more unfavorable natural conditions in the drilling of the wells

(high temperatures and pressures), which has a considerable impact on the effectiveness of well drilling.

It also had an impact on the output of the rigs, which was down 9 percent from 1981 (in INA-Naftaplin it was down all of 12 percent). The unchanged number of rigs in operation from the previous year leads to the conclusion that capacity was not as well utilized, which also contributes to a considerable rise in drilling costs. Ever more pronounced engineering and technological problems will in future require greater reliance on our own personnel and domestic manufacturers of equipment.

4. Petroleum and Gas Production

Total petroleum and gas production in Yugoslavia during 1982 was maintained at the 1981 level. This means that success was achieved in only making up for the natural decline of production, which averages 8-10 percent per year.

Table 6. Petroleum and Gas Production in Yugoslavia

<u>Petroleum Production, 10³ tons</u>	<u>1981</u>	<u>1982</u>	<u>Index</u>
INA-Naftaplin	3,141	3,047	97
Naftagas	1,244	1,303	105
INA-Nafta, Lendava	<u>5</u>	<u>--</u>	<u>--</u>
Total	4,390	4,350	99
<u>Natural Gas Production, millions of m³</u>			
INA-Naftaplin	1,169	1,245	107
Naftagas	1,061	983	93
INA-Nafta, Lendava	<u>--</u>	<u>--</u>	<u>--</u>
Total	2,230	2,228	100

Petroleum production was down 3 percent in INA-Naftaplin, but natural gas production was up 7 percent, mainly thanks to production from the Molva field. The results were just the opposite in Naftagas. Petroleum production was up 5 percent, but than gas production was down 7 percent. However, this reduction is more a consequence of capacity for consumption not being adjusted to production capabilities. The difficulties in purchasing imported equipment, supplies and spare parts are becoming more and more evident in production of petroleum and gas in both work organizations, and this certainly had an impact on the production results achieved.

BIBLIOGRAPHY

1. Technical documentation of Naftagas.
2. Business documentation of Naftagas.

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OIL REFINING IN 1982

Zagreb NAFTA in Serbo-Croatian Sep 83 (manuscript received 17 May 83) pp 519-521

[Article by Vilim Boranic, chemical engineer, Zagreb]

[Text] On the basis of available preliminary data the article analyzes the trend of petroleum refining in Yugoslavia in 1981 and 1982. Because of difficulties in purchasing petroleum--especially imported petroleum--refining in 1982 totaled 12.7 million tons of petroleum, as against 13.4 million tons in 1981, or a drop of 5 percent.

The production of the various products found its level according to the needs of the market and according to possibilities for committing the capacities in primary and secondary petroleum refining.

According to the preliminary and available figures on the operation of the refineries of the General Association of Organizations of the Yugoslav Petroleum Industry for 1982 an analysis was made of petroleum refining in our country without entering into the problems of the various refineries.

In 1982 a total of 12,762,000 tons of petroleum were refined, as against 13,401,000 tons [in the previous year], or a drop of 639,000 tons, which is 5 percent. Back in 1979 15,821,000 tons were refined, which is the highest figure to date, and the amount of petroleum refined has shown a steady declining tendency since that time.

We should mention that the figures for 1981 were published in NAFTA, Vol 33, pp 495-498 (No 9, 1982).

The difficulties in purchasing imported petroleum continued in 1982, and its reduced imports were irregular and late, and other factors also had an adverse influence on the operating economy of all our refineries.

Aside from the available quantities of domestic petroleum, the refineries have also been refining imported petroleum, whose inflow--for financial and organizational reasons--has been reduced and irregular, so that from time to time certain quantities of finished petroleum products had to be imported, mainly for purposes of intervention. In 1982 4,306,000 tons of domestic

petroleum were refined (33.7 percent) and 8,456,000 tons of imported petroleum (66.3 percent). The imported petroleum was distributed according to an agreement among the refineries, while the domestic petroleum was refined by those refineries which are favorably located relative to the petroleum fields.

Capacities for primary refining of petroleum amounted to about 28 million tons per year in 1982, so that in view of the petroleum refined they were on the average utilized at a level below 50 percent. In 1981 utilization was 52.6 percent, and in 1980 about 58 percent.

Of course, such low utilization of capacity was a consequence of the irregular arrival of the necessary petroleum. The fluctuation in the employment of capacity for primary petroleum refining also had an effect on the operation of the capacity for secondary petroleum refining and on the operating economy of the various refineries.

Table 1 shows the production of the principal groups of petroleum products, which, just as in the past, varied according to the peculiarities of the petroleum refined and according to the needs of the market, which varied considerably in structure in the winter and summer months.

The table indicates separately production for the market and the internal consumption of the refineries and refining loss.

Table 1. Yields of Petroleum Refining (and Additives) in Yugoslavia

Indicator	1981		1982		Index
	10 ³ t	%	10 ³ t	%	
Gasoline	2,079	15.5	2,031	15.8	98.1
Jet fuel and kerosene	305	2.3	278	2.2	90.5
Diesel fuel, household heating oil and extra light heating oil	3,536	26.3	3,864	30.0	109.2
Furnace oil (mazut)	3,852	28.7	3,631	28.2	94.0
Other products	2,524	18.7	1,950	15.1	70.6
Total for the market	12,296	91.5	11,754	91.3	95.4
Internal consumption	920	6.8	911	7.1	99.0
Refining losses	223	1.7	200	1.6	88.5
Petroleum refined and additives	13,439	100.0	12,865	100.0	95.6

Table 2. Ratio Between Products for Energy Purposes and Products for Nonenergy Purposes

Indicator	1981		1982		Index
	10 ³ t	%	10 ³ t	%	
Energy products	10,692	79.6	10,715	83.3	99.8
Nonenergy products	2,747	20.4	2,150	16.7	72.2
Total	13,439	100.0	12,865	100.0	95.6

As can be seen from the table, in 1982 12,865,000 tons of petroleum and additives were refined, as against 13,439,000 tons in the previous year, which means about 575,000 tons less, or a drop of 4.4 percent. In 1980 almost 15.4 million tons were refined.

Production for the market amounted to 11.8 million tons, as against 12.3 million tons in 1981, or a drop of 4.6 percent, while the share in total refining in both years was almost the same--91.3 percent and 91.5 percent, respectively. However, yields in the various product groups--especially in the case of the heavy products--did change. The greatest differences concerned the group of diesel fuel, household heating oil and extra light heating oil, whose share was 26.3 percent in 1981 and rose to 30.0 percent in 1982, and for the group of other products, whose share dropped from 18.7 percent to 15.1 percent.

Even though a smaller quantity of petroleum was refined in 1982, the quantity of gasoline produced remained almost the same. That is, in 1982 production amounted to 2,031,000 tons, as against 2,079,000 tons in 1981. In 1982, then, only 48,000 tons fewer were produced, which is a drop of 1.9 percent. But since less petroleum was refined, its share in total refined output grew from 15.5 percent to 15.8 percent.

Production of jet fuel (and kerosene) was almost 10 percent less in 1982 than in the previous year, dropping from 305,000 tons to 278,000 tons. The share remained almost the same; that is, it was 2.3 percent in 1981 and 2.2 percent in 1982.

The group of products referred to as intermediate distillates, i.e., diesel fuel, household heating oil and extra light heating oil, showed a 9.2-percent growth of output: from 3,536,000 tons in 1981 to 3,864,000 tons in 1982, an increase of 328,000 tons. For that same reason their share in total consumption rose from 26.3 percent to 30.0 percent. In view of the needs of the market slightly more than 3 million tons of diesel fuel were produced, and the remainder consisted of heating oil of a distillate nature and for various purposes.

The production of residual furnace oil, referred to as mazut, amounted to 3,631,000 tons in 1982, as against 3,852,000 tons in the previous year, which is a drop of 321,000 tons, or 6 percent. Its share of the petroleum refined dropped 0.5 percent, and that from 28.7 percent to 28.2 percent.

Production of so-called "other products," which are liquefied gases, special gasolines, white spirits, primary gasoline, aromatics, lubricants, paraffin, petroleum coke, etc., amounted to 1.95 million tons in 1982, as against 2,524,000 tons in 1981. Production, then, was down 574,000 tons, or almost 30 percent. The reason for this is the lower production of primary gasoline on behalf of motor gasoline and in part the smaller production of asphalt on behalf of heavy furnace oil.

In spite of the more difficult operating conditions--irregular delivery of petroleum, frequent interruptions of refining, etc.--the refineries

nevertheless managed to reduce their internal consumption 1 percent and refining losses more than 10 percent. That is, internal consumption of the refineries in 1981 was 920,000 tons, while in 1982 it was 911,000 tons, while refining losses were 223,000 tons in 1981 and 200,000 tons in 1982. The share of internal consumption in total refining was 7.1 percent in 1982, as against 6.8 percent in 1981, while the respective figures were 1.6 percent and 1.7 percent for refining losses.

Table 2 breaks production down into products serving energy purposes and those serving nonenergy purposes; the first group included the internal consumption of refineries along with all the other products, except for what we referred to as "other products," which, along with the loss, are counted as nonenergy products.

As we see from the table, in 1982 the refineries nevertheless managed to produce almost the same quantity of products for energy purposes which were scarce--indeed 27,000 tons more--in spite of the smaller quantity of petroleum refined (a drop of 574,000 tons). That is, 10,692,000 tons of these products were produced in 1981, while output in 1982 was 10,715,000 tons. Since less petroleum was refined, the share in 1982 was 83.3 percent, while in 1981 it was 79.6 percent.

The increase in the output of products for energy purposes occurred at the expense of those for nonenergy purposes, whose production dropped from 2,747,000 tons in 1981 to 2.15 million tons in 1982. A drop, then, of 597,000 tons, or almost 28 percent, mainly at the expense of primary gasoline and asphalt. Relative to the petroleum produced, the share dropped from 20.4 percent in 1981 to 16.7 percent in 1982.

Although in 1982 the refineries again operated under extremely difficult operating conditions, nevertheless they did perform their permanent task of maintaining the quality of their products at the high level already achieved and in conformity with the requirements of consumers. Aside from that they made an effort to pollute the atmosphere with their operation as little as possible and to reduce pollution with effluents.

The year 1982 was a difficult one for the refineries not only in their refining of petroleum, but also with respect to expanded reproduction, and because of the financial situation construction of certain installations was again slowed down, and the work to bring them on stream in regular operation was postponed.

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MARKETING, CONSUMPTION OF OIL PRODUCTS IN 1982

Zagreb NAFTA in Serbo-Croatian Sep 83 pp 523-525

[Article by Vojteh Brajčić, economist, MA in economics, vice chairman of the Business Committee of INA-Commerce in Zagreb]

[Text] Consumption of petroleum products on the Yugoslav market in 1982 occurred in a context of new higher prices, which nevertheless did not manage to altogether regulate the (relatively) scanty supply. More thanks to the temporary shortage of petroleum products, especially in the latter months of last year, total consumption was down 2 percent from 1981, and it totaled 14.2 million tons. The sale of motor gasoline was 2,064 million tons, or down 4 percent, sales of gas oil amounted to 4,048 million tons, or 4 percent less, and sales of heating oils 4,865 million tons, an increase of 1 percent, and so on. Natural gas consumption last year amounted to 4.6 billion m³, which is 11 percent more than in 1981.

A new and considerable increase in the price of petroleum products occurred last year on the Yugoslav market for these products, but the prices, just as in 1981, obviously were unable to bring consumption within the limits of the available--smaller--quantities of the products.

The prices of petroleum products rose 15-40 percent over the previous year in nominal terms. If we correct those values by the rise of retail prices, which was 30 percent, we get a real growth rate of 10 percent for gasoline, 8 percent for diesel fuel and all of 15 percent for heavy furnace oil.

Similar results would be obtained by adjusting the nominal growth for the growth of personal income, which means that objectively the prices were unable to bring about a reduction of consumption of petroleum products in 1982.

Consumption per passenger car, omitting consumption by other vehicles and foreign passenger cars in 1982, amounted to 648 kg, as against 680 kg in 1981. This reduction is 31 percent from the last year before the crisis, 1973, when consumption per vehicle was 639 kg.

We can conclude from the figures of the Federal Bureau of Statistics on the production, importation and exchange of passenger cars that at the end of last year there were 2,682,000 passenger cars registered in Yugoslavia, as

against 2,568,000 automobiles recorded a year previously, an increase of only 4.4 percent.

In 1982 6.8 million foreign vehicles crossed the border, which is 13 percent fewer than the 7.8 million which did so in 1981. In 1982 a total of 2,064,000 tons of motor gasoline were sold, as against 2,142,000 tons in 1981, which is a drop of 4 percent.

The prices could not play any significant role in consumption of household heating oils in 1982 since for all practical purposes they did not even change, but the insufficient quantities of this article did have a considerable influence on consumption.

In 1982 a total of 1,138,000 tons of extra light heating oil were consumed, as against 1,396,000 tons in 1981, or a drop of 18 percent.

The number of trucks increased about 7 percent in 1982 and the number of tractors about 9 percent. Highway transportation activity was down 4 percent for passenger traffic from the previous year in 1982. Freight traffic in 1982 was 20.5 billion ton-km, as against 21.5 billion in 1981, or a drop of 5 percent. All that we have said brought about a change in consumption, which in 1982 totaled 2.91 million tons, as against 2.81 million tons in 1981.

Again in the case of mazut a chronic shortage of the product had a greater effect on consumption than the price, but unfavorable hydrological conditions in 1982 were also involved since they did not make it possible to cut back on mazut consumption in thermal electric power plants.

Under those conditions mazut consumption increased to 4,865,000 tons, as against the 4,826,000 tons recorded in 1981, all of this without internal consumption in the refineries, which is staying at the same level.

Less asphalt was consumed in 1982 than a year previously. The total was 509,000 tons, as against 602,000 tons in 1981, or a drop of 15 percent.

Table 1. Nominal Prices of Petroleum Products in SFRY, 1973-1982

Sale Price	Average Nominal Prices Per Liter*			Index	
	1973	1978	1982	82/78	82/73
Motor gasoline, 98 octane	3.81	7.28	33.60	462	882
Diesel fuel D-2	1.72	4.75	27.90	587	1,622
Extra light heating oil	1.40	2.88	17.10	594	1,221
Intermediate heating oil	0.69	1.71	9.20	538	1,333

*1 Except for heating oil, which is given in dinars per kilogram.

2 The real prices were computed on the basis of 1982 = 100 against the retail price index in Yugoslavia (INDEKS, No 1, 1983, Federal Bureau of Statistics, Belgrade).

3 The 1982/1978 retail price index is 302; the 1982/1973 retail price index is 584.

Table 2. Real Prices of Petroleum Products in SFRY, 1973-1982

Sale Price	Average Real Prices Per Liter*			Index		
	1973	1978	1982	82/78	82/73	78/73
Motor gasoline, 98 octane	22.25	22.00	33.60	153	151	99
Diesel fuel D-2	10.05	14.35	27.90	194	278	143
Extra light heating oil	8.18	8.70	17.10	197	209	106
Intermediate heating oil	4.03	5.16	9.20	178	228	128

*1 Except for heating oil, which is given in dinars per kilogram.

2 The real prices were computed on the basis of 1982 = 100 against the retail price index in Yugoslavia (INDEKS, No 1, 1983, Federal Bureau of Statistics, Belgrade).

3 The 1982/1978 retail price index is 302; the 1982/1973 retail price index is 584.

Table 3. Gasoline Consumption Per Vehicle in SFRY

Indicator	1973	1978	1979	1980	1981	1982
Total gasoline consumption, in thousands of tons	1,465	2,338	2,329	2,120	2,147	2,093
Number of passenger cars, in thousands of tons*	1,071	2,033	2,196	2,345	2,501	2,625
Consumption per vehicle, in kg	1,368	1,150	1,060	904	859	797
Adjusted consumption per vehicle, in kg**	939	878	820	690	680	648
Index						
1973 = 100	100	94	87	73	72	69
Per vehicle, 1978 = 100	107	100	93	78	77	74

* Average number of vehicles during the year.

** The adjustment was made by omitting gasoline consumption by other consumers (motorcycles, various other vehicles and motors, and then foreign tourists, transit and the like).

Motor oil sales were 108,000 tons, or a drop of 2 percent. The share of motor oil relative to gasoline and diesel fuel is continuing to drop, and in 1982 amounted to only 2.7 percent, which has approximated the usual percentages (ranging from 1.7 to 1.9 percent) for the advanced countries.

Consumption of industrial oils and greases was 294,000 tons, or a drop of 5 percent. Jet fuel sales dropped 12 percent from 328,000 tons to 290,000 tons. The unfavorable prices and also the shortage of this article had a considerable influence on consumption of foreign airlines.

The shortage of liquefied gas on the domestic market was especially felt in the winter months, but still a total of 414,000 tons were sold, or only 1 percent less than a year previously.

In 1982 the Yugoslav market consumed a total of 13,902,000 tons of petroleum products, as against 14,230,000 tons in 1981, or a drop of 2 percent.

Table 4. Consumption of Petroleum Products in Yugoslavia in 1982, in thousands of tons

Indicator	1979	1980	1981	1982	Index 82/81	Structure of Consumption	
						1981	1982
Primary gasoline	272	424	469	524	112	3.3	3.8
Aviation gasoline	18	18	18	18	100	0.1	0.1
86-octane gasoline	572	506	516	491	95	3.6	3.5
98-octane gasoline	1,757	1,612	1,626	1,573	97	11.4	11.3
Total gasoline	2,329	2,118	2,142	2,064	96	15.0	14.8
Special gasolines and white spirit	70	64	78	70	90	0.5	0.5
Jet fuel and kerosene	345	351	328	290	88	2.3	2.1
Diesel fuel	3,005	2,949	2,810	2,910	104	19.8	20.9
Extra light heating oil	1,797	1,695	1,396	1,138	82	9.8	8.2
Total gas oils	4,802	4,644	4,206	4,048	96	29.6	29.1
Furnace oil (mazut)	6,862	6,293	5,355	5,400	101	37.6	38.8
Furnace oil not includ- ing internal consump- tion of refineries	6,373	5,785	4,826	4,865	101	33.9	35.0
Asphalt	785	638	602	509	85	4.2	3.7
Motor oils	114	111	110	108	98	0.8	0.8
Lubricant oils	247	254	298	283	95	2.1	2.0
Lubricant greases	10	10	10	11	110	0.1	0.1
Paraffin	10	11	14	13	93	0.1	0.1
Liquefied gas	413	392	420	414	99	3.0	3.0
Miscellaneous	107	179	180	150	83	1.3	1.1
Grand total	16,383	15,507	14,230	13,902	98	100.0	100.0
Consumption for energy	14,749	13,816	12,469	12,234	98		
Consumption for nonen- ergy purposes	1,614	1,691	1,761	1,668	95		

There were definite changes in the structure of consumption. Furnace oil continues to have the highest share with 38.8 percent, but this is considerably less than, say, in 1980, when mazut accounted for 42.4 percent of consumption. This share is still higher than the yield of the Yugoslav refineries, which in 1982 was about 28.2 percent. The difference was met through imports.

The share of gas oils remained at the level of about 29 percent. We did that of gasoline at about 15 percent. When it comes to gasoline, we should mention that the share of regular is continuing to drop, so that in 1982 it amounted to only 23.7 percent. It is obvious that on this occasion we must once again note that the Yugoslav market wants a gasoline with a high octane number and that our refineries are a bit late in this regard.

The share of other products has mainly remained unchanged.

Consumption for energy purposes accounted for 12,234,000 tons of total consumption of petroleum products on the Yugoslav market. Consumption for non-energy purposes amounted to 1,668,000 tons, or 12 percent of total consumption.

Consumption of natural gas on the Yugoslav market was limited by domestic production, which in 1982 amounted to 2,228 billion m³, and by imports amounting to 2,402 billion m³. In all, then, 4,630 billion m³ were consumed, or 11 percent more than in 1981.

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